

# The Mining Journal.

## RAILWAY AND COMMERCIAL GAZETTE:

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

[The Mining Journal is Registered at the General Post Office as a Newspaper and for Transmission Abroad.]

No. 2443.—Vol. LII.

LONDON, SATURDAY, JUNE 17, 1882.

[WITH SUPPLEMENT.] PRICE SIXPENCE PER ANNUM, BY POST 41

**M. JAMES H. CROFTS, STOCK AND SHARE BROKER AND MINING SHARE DEALER,**  
No. 1, FINCH LANE, CORNHILL, LONDON, E.C.  
ESTABLISHED 1842.

BUSINESS transacted in all descriptions of Mining Stocks and Shares (British and Foreign), Consols, Bonds (Foreign and Colonial), Railways, Insurance, Assurance, Telegraph, Tramway, Shipping, Canal, Gas, Water, and Dock Shares, and all Miscellaneous Shares.  
Business negotiated in Stocks and Shares not having a general market value.

Every Friday a general and reliable List issued (a copy of which will be forwarded on application), containing closing prices of the week.

**MINES INSPECTED.**  
BANKERS: CITY BANK, LONDON—SOUTH CORNWALL BANK, ST. AUSTELL.

**SPECIAL DEALINGS** in the following, or part:—  
40 Almaden, 17s. 6d. 35 Hingham Down, 18s. 9  
75 Almaden, 10s. 6d. 50 Herodfoot, 10s.  
25 Bedford United, 33s. 9 50 Hoover Hill, 3s. 6d.  
25 Bratsberg, 31s. 50 Javali, 5s.  
50 Bwch United, 15s. 100 Killifreth, 2s.  
50 Carnarvon Cop., 9s. 100 La Plata, 22 1/2s.  
75 Callao Bis, 10s. 200 Langford, 6s.  
50 Consolidated, 5s. 50 Last Chance, 10s.  
25 D'Ereby Mount, 13s. 9 20 Leadhills, 22 1/2s.  
20 Devon Con., 24 1/2s. 50 Marke Valley, 8s. 9d.  
100 Devon Friend., 5s. 6d 10 Mona.  
50 Don Pedro, 6s. 50 Mona Consols, 20s.  
100 Drakeville, 12s. 6d. 50 Morfa Du, 8s. 9d.  
50 East Blue Hills, 10s 50 Mysore Gold, 17s. 6d.  
50 East Caradon, 7s. 100 No. Herodfoot, off. w.  
50 E. Chiverton, 25s. 75 Nouv. Monde, 10s. 3d  
30 East Lovell, 21 1/2s. 20 No. Penstruthal, 9s. 9  
70 E. Roman Grav., 10s 50 New W. Caradon, 3s. 3  
50 English Australian Gold, 10s. 6d. 100 Old Owiccombe, 2s.  
25 Frontino, 23 1/2s. 25 Old Shepherds, 8s. 9d  
100 Glenrock, 21 1/2s. 9d. 50 Organo, 22s.  
50 Glenroar, 6s. 50 Pioneer, 12s.  
50 Gold Coast, 21 1/2s. 50 Polrose, 2s. 6d.  
40 Gt. West Chir., 2s. 6d 40 Port Phillip, 4s. 6d.  
60 Grogwinlon, 7s. 50 Potosi, 13s. 3d.  
15 Gwydyr Amal., off. w. 50 Potosi, 13s. 3d.

\* \* SHARES SOLD FOR FORWARD DELIVERY (ONE, TWO, OR THREE MONTHS) ON DEPOSIT OF TWENTY PER CENT.  
\* \* SPECIAL BUSINESS AT CLOSE PRICES in all Market TIN, COPPER and LEAD SHARES.

JAMES H. CROFTS, 1, FINCH LANE, LONDON.

**ELECTRIC LIGHT SHARES**—SPECIAL BUSINESS in Anglo-American Brush, Brush Electric of Scotland, Western Brush, Midland Brush, Electric Light and Power Generator, Hammond, &c.  
Shares sold for cash, account, or for forward delivery (one, two, or three months) on deposit of 20 per cent.

JAMES H. CROFTS, 1, FINCH LANE, LONDON.

**RAILWAYS—FOREIGN BONDS—SPECIAL BUSINESS.**  
Fortnightly Accounts opened on receipt of the usual cover.

JAMES H. CROFTS, 1, FINCH LANE, LONDON.

**AMERICAN AND CANADIAN STOCKS AND SHARES—SPECIAL BUSINESS.**  
Fortnightly Accounts opened on receipt of the usual cover.

JAMES H. CROFTS, 1, FINCH LANE, LONDON.

**OPTIONS, SINGLE OR DOUBLE, dealt in at close market prices.**  
JAMES H. CROFTS, 1, FINCH LANE, LONDON.

**INDIAN GOLD MINES.—SPECIAL BUSINESS in:—**  
Cootacoville, Indian Phoenix, Rhodes Reef, Devala Moyer, Indian Kingdom, South-East Wynaad, Devala Central, Indian Trevelyan, Tambracherry, Indian Consolidated, Mysore, Wynaad Perseverance, Indian Glenrock, Oregum.

At CLOSE MARKET PRICES, free of commission.  
\* \* Reliable information given on any of the above. A daily price list issued giving closing quotations. SPECIAL BUSINESS in La Plata, Rio Tinto, Frontino and Bolivia, Potosi, Ruby, Nouveau Monde, and Richmond.

\* \* SHARES IN THE ABOVE INDIAN OR OTHER GOLD AND SILVER MINES SOLD FOR FORWARD DELIVERY ONE, TWO, OR THREE MONTHS ON DEPOSIT OF TWENTY PER CENT.  
JAMES H. CROFTS, 1, FINCH LANE, LONDON.  
ESTABLISHED 1842.

**MR. W. H. BUMPUS, STOCK AND SHARE BROKER, AND MINING SHARE DEALER**  
44, THREADNEEDLE STREET, LONDON, E.C.  
ESTABLISHED 1867.

BUSINESS transacted in STOCK EXCHANGE SECURITIES and MISCELLANEOUS SHARES of every description. RAILWAYS, FOREIGN AND COLONIAL BONDS, TRAMWAYS, TELEGRAPHS, and all the LEADING INVESTMENTS.

Accounts opened for the Fortnightly Settlement.

A List of Investments free on application.

Mr. BUMPUS has SPECIAL BUSINESS in the undermentioned:—

50 Akankoo, 8s. 6d. 25 Frontino, 23 1/2s. 6d. 20 New Quebrada, 24 1/2s. 100 Almaden, 11s. 3d. 100 Great Polgoth Unit., 11s. 3d. 50 Prince of Wales, 10s. 40 Bratsberg, 33s. 6d. 100 Parys Copper, 11s. 6d. 30 Panulicillo, 26 7s. 6d. 100 Carn Camborne, 16s. 3 50 Gold Coast, 21 1/2s. 6d. 100 Potosi, 13s. 3d. 150 Chile Gold, 11s. 6d. 15 Great Holway, 25 1/2s. 6d. 20 Richmond, 29 1/2s. 9d. 30 Hingham Down, 17s. 6 20 Ruby (Old), 42 1/2s. 6d. 50 Indian Phoenix, 35s. 3 100 Rhodes Reef, 21s. 3d. 50 Carn Brea, 50 Indian Consolidated, 150 Sortridge, 20 South Crebore, 10s. 25 Copiapo, 23 1/2s. 31s. 6d. 50 Indian Glenrock, 31s. 6d. 50 Tregembo, 35s. 100 Callao Bis, 10s. 9d. 50 Indian Trevelyan, 10 Tincroft. 100 Devon Friend., 17s. 150 Tankerville, 5s. 6d. 20 Devon Consols, 27s. 100 La Plata, 22 1/2s. 6d. 100 West Devon Copper, 8s. 6d. 75 Devala-Moyar, 27s. 50 Michipicoten, 20s. 6d. 50 Wheel Jewell, 5s. 50 Devon Great United, 100 Mysore Gold, 16s. 3d. 50 Wh. Grenville, 50 Derwent, 10s. 25 Marke Valley, 10s. 10 West Kitty, 70 Eberhard, 12s. 50 New Trumpet, 20s. 6d 25 Wheal Crebore, 22 1/2s. 40 East Blue Hills, 50 Norway Copper, 20s. 6d 2 East Pool. 100 Nouv. Monde, 10s.

SPECIAL BUSINESS, at close prices, in the SHARES of all the principal HOME and FOREIGN MINES.

IMPORTANT TO INVESTORS.—Shares in SOUND DIVIDEND and PROGRESSIVE MINES (particularly TIN and COPPER) should be bought at present prices, as many of them are likely to have a considerable rise within the next few months.

Mr. BUMPUS devotes special attention to these Securities, and is in a position to afford reliable information and advice to intending investors and others.

WHEAL GRENVILLE and WEST GODOLPHIN shares are recommended for investment at present prices.

WILLIAM HENRY BUMPUS, SWORN BROKER.  
OFFICES: 44, THREADNEEDLE STREET, LONDON, E.C.  
ESTABLISHED 1867.

**ABBOTT AND CO.,** STOCK AND SHARE BROKERS,  
9, CORNHILL, LONDON, E.C.  
SILVER HILL Shares should be bought at present prices. June Circular post free on application.

**MR. JOHN RISLEY, STOCK AND SHARE BROKER,**  
38, CORNHILL, LONDON, E.C.  
ESTABLISHED TWENTY YEARS.  
BANKERS: LONDON AND WESTMINSTER, Lothbury.

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Messrs. PETER WATSON AND CO.,  
AUSTIN FRIARS,  
OLD BROAD STREET, LONDON, E.C.  
BANKERS: THE ALLIANCE BANK (Limited).

**Messrs. PETER WATSON AND CO.'S**  
BRITISH AND FOREIGN MONTHLY MINING NEWS  
—STOCK AND SHARE INVESTMENT NOTES—MINES,  
MINERALS, AND METAL MARKETS—SHARE LIST,  
No. 842, Vol. XVII., for JUNE month, is now ready, and will be sent to customers on application.

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18, AUSTIN FRIARS, E.C.

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DEALER in BRITISH AND FOREIGN STOCKS and SHARES  
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ESTABLISHED 1853.  
9, OLD BROAD STREET, LONDON.

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Mr. ALFRED E. COOKE can sell the following lots (or any smaller number of shares) to immediate applicants at prices annexed, free of commission.

Where prices are not inserted, the market price of the day will be taken, or offers may be made:—

40 Bratsberg Cop., 30s. 50 Caranvon Cop., 10s 50 Chile Gold, 12s. 100 Chile Gold, 12s. 40 Devala Gold, 28s. 3d. 50 Devon Friend., 5s. 3d 50 Devon Gt. Uni., 12s. 6 50 Devon Con. Copper. 50 Don Pedro Gold. 50 D'Ereby Mtn. and Copper, 12s. 6d. 10 East Lovell Tin, 21 1/2s. 50 East Roman Gravel, 12s. 12s. 50 East Rose Lead. 50 East Blue Hills Tin, 10s. 3d. 50 Eng. Australian Gold 10s. 10 Frontino Gold, 23 1/2s. 20 Gawn Copper, 10s. 6 20 Gunnislake (Clitters) Copper, 22 1/2s. 40 Hoover Hill, 3s. 80 Indian Glenrock Gold 41 10s. 50 Indian Phoenix, 11 1/2s 50 Indian Trevelyan Gold, 12s. 9d. 120 Indian Consoli., 19s 6 50 La Plata Lead, 42 15 Leadhills, 22 1/2s. 30 Langford Silver, 7s. 50 Mona Con. Cop., 20s. 10 Morfa Du, 7s. 40 Mysore Gold. 20 Michipicoten Copper, 22s. 6d. 20 New Kitty Tin, 42. 100 New West Caradon 10s. 3d. 50 No. Herodfoot, 3s. 9d 70 Nouveau Monde Gold, 10s. 6d. 60 No. D'Ereby Lead 40 Organo Gold. 20 Potosi Gold, 14s. 30 Pioneer Copper and Lead, 12s. 12s.

Many of the above shares can be sold for settlement by arrangement at the mid or end of July account on payment of 20 per cent. deposit. Shares not found in the above list may be purchased on application.

**SPECIAL NOTICE.**—SHARES in all MINES and STOCKS and SECURITIES of EVERY DESCRIPTION can be supplied at LOWEST POSSIBLE NET PRICES for CASH, ACCOUNT, or FORWARD DELIVERY.

Mr. Alfred E. Cooke is buyer of shares in all the LEADING MINES at current market price.

**FOREIGN STOCKS.** ENGLISH AND AMERICAN RAILWAYS.

TELEGRAMS and LETTERS receive immediate attention. All shares currently dealt in, bought and sold, free of commission.

**INDIAN GOLD MINES.** SPECIAL BUSINESS AT CLOSE PRICES.

DEVON FRIENDSHIP, 5s. 3d. WEST CREBORE.

Sortridge Copper, 4s. 6d. NEW WEST CARADON, 3s.

EAST BLUE HILLS, 10s. 3d. WEST DEVON, 8s.

TELEPHONE AND ELECTRIC LIGHT. SPECIAL BUSINESS IN ALL SHARES.

SPECULATIVE ACCOUNTS OPENED ON RECEIPT OF COVER.

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(Opposite the Stock Exchange, with which the offices are in DIRECT TELEGRAPHIC COMMUNICATION.)

**MR. JAMES STOCKER, STOCKBROKER,**

2, CROWN COURT, THREADNEEDLE STREET, LONDON, E.C.

Has special business in the following for cash or settlement by arrangement:—

150 Akankoo, 8s. 3d. Indian Consolidated, 18s. 9d. Prince of Wales, 10s. 3d. 25 Bedford Unit., 38s. 6 50 Bratsberg Cop., 30s. Indian Phoenix, 11 1/2s. 30s. 6d. 50 Chile Gold, 12s. 3d. Kapanga, 15s. 50 Caranvon Cop., 10s 50 Leadhills, 22 1/2s. 30s. 6d. 50 D'Ereby Mount, 12s. 6d. 50 Devon Friend., 5s. 3d. 50 Devon Gt. Uni., 12s. 6 50 Devon Con. Copper. 50 Don Pedro Gold. 50 D'Ereby Mtn. and Copper, 12s. 6d. 10 East Lovell Tin, 21 1/2s. 50 East Roman Gravel, 12s. 12s. 50 East Rose Lead. 50 East Blue Hills Tin, 10s. 3d. 50 Eng. Australian Gold 10s. 10 Frontino Gold, 23 1/2s. 20 Gawn Copper, 10s. 6 20 Gunnislake (Clitters) Copper, 22 1/2s. 40 Hoover Hill, 3s. 80 Indian Glenrock Gold 41 10s. 50 Indian Phoenix, 11 1/2s 50 Indian Trevelyan Gold, 12s. 9d. 120 Indian Consoli., 19s 6 50 La Plata Lead, 42 15 Leadhills, 22 1/2s. 30 Langford Silver, 7s. 50 Mona Con. Cop., 20s. 10 Morfa Du, 7s. 40 Mysore Gold. 20 Michipicoten Copper, 22s. 6d. 20 New Kitty Tin, 42. 100 New West Caradon 10s. 3d. 50 No. Herodfoot, 3s. 9d 70 Nouveau Monde Gold, 10s. 6d. 60 No. D'Ereby Lead 40 Organo Gold. 20 Potosi Gold, 14s. 30 Pioneer Copper and Lead, 12s. 12s.

BANKERS: LONDON AND WESTMINSTER.

**MR. W. B. COBB, STOCK AND SHARE DEALER,**

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Can sell the following SHARES at prices annexed:—

150 Akankoo, 8s. 3d. 40 Indian Phoenix, 11 1/2s 25 South Darren, 14s. 6 25 Bedford Unit., 38s. 6 50 Indian Glenrock Gold 41 10s. 50 South Devon, 18s. 6d 50 Bratsberg Cop., 30s. 50 Leadhills, 22 1/2s. 100 Sortridge Con., 4s. 6 30 So. East Wynaad, 37s 50 Chile Gold, 12s. 3d. 20 Killifreth, 2s. 18s. 9d. 50 Tankerville, 5s. 3d. 50 United Van Con., 11s 3 75 D'Ereby Mount, 12s. 6d. 10 Lovell Tin, off. wtd. 50 West Crebore, 11s. 6d. 25 Devon Gt. Uni., 12s. 6 20 Mysore Gold, 18s. 9d. 50 West Caradon, 8s. 6d. 50 Dev. Friendship, 5s. 25 Mona Consols, 23s. 50 West Lisburne, 18s 9d 20 Devala Moyer, 21 1/2s. 100 Organo Gold, 18s. 6d. 50 West Devon. 50 Eberhard, 11s. 3d. 50 F. of Wales, 3s. 3d. 20 Wheal Crebore, 22 1/2s. 30 East Blue Hills, 11s. 25 Parys Corpora., 10s. 5 Wheal Bassett, 410 1/2s. 50 Grogwinlon, 15s. 6d. 20 Rhodes Reef, 19s. 25 Wynaad Perseverance 25s. 75 Hoover Hill, 5s. 6d. 40 South Crebore.

Shares in Home, Foreign, and Colonial mines, bought and sold at net market prices, free of commission.

Purchases for forward delivery at special prices on receipt of deposit of 20 per cent.

**SPECIAL BUSINESS** in Indian gold mines, also in rails, trams, Egypt, Ottoman Banks, Turks, and Lombards, for cash or account on receipt of usual cover.

BANKERS: ALLIANCE BANK (Limited)

**THE FOLLOWING SHARES** are strongly RECOMMENDED

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Indian, American Stocks. British, Foreign, Colonial Mines.

Bank, Financial Shares. Tea, Land Shares.

Tramway, Dock Shares. Shipping, Dock Shares.

Municipal Bonds. Miscellaneous Shares, &c., &c.

**CHEAP SHARES WORTH BUYING FOR A RISE:—**

Almaden & Tinto ..... 20 10 0 to 2 11 0 Michipicoten ..... 2 18 0 to 2 1 0 0

Bedford United ..... 1 18 0 ... 2 0 0 Nouveau Monde ..... 0 6 0 ... 0 8 0

Bratsberg ..... 1 12 0 ... 1 15 0 Organo ..... 0 18 0 ... 1 0 0

Devon Friendship ..... 0 4 0 ... 0 5 6 Parys Copper ..... 0 9 0 ... 0 11 0

East Blue Hills ..... 0 9 0 ... 0 11 0 Prince of Wales ..... 0 9 0 ... 0 11 0

East Caradon Moor ..... 0 10 0 ... 0 12 0 Sortridge ..... 0 4 0 ... 0 5 0

East Chiverton ..... 1 7 6 ... 1 10 0 South Darren ..... 0 15 0 ... 0 17 6

Gawton ..... 0 9 0 ... 0 11 0 West Caradon ..... 0 7 0 ... 0 9 0

Grogwinlon ..... 0 7 6 ... 0 10 0 West Crebore ..... 0 10 0 ... 0 12 0

Killifreth ..... 5 15 0 ... 5 17 6 West Phoenix ..... 0 12 6 ... 0 15 0

Marke Valley ..... 0 8 0 ... 0 10 0 Wheal Jane ..... 0 1 0 ... 1 2 6

Mona ..... 4 5 0 ... 4 10 0 Wheal Jewell ..... 0 3 0 ... 0 4 0

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saves neither time nor expense in securing for his numerous correspondents opportunities for obtaining the best investments.

Mr. REYNOLDS refers his numerous readers to the official reports and to the positions generally of the following mines:—West Kitty, West Polbreon, Wheal Coates, and Trevaunance.

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**FERDINAND R. KIRK, STOCKBROKER,**

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Fortnightly Accounts opened in all Stock Exchange Securities on receipt the usual cover.

BANKERS: LONDON AND WESTMINSTER, Lothbury.

**GRANVILLE SHARP, STOCK AND SHARE DEALER,**

32, QUEEN VICTORIA STREET, LONDON, E.C.

Recommends the immediate purchase of shares in the

**EAST CHIVERTON SILVER-LEAD MINE,**

Full particulars on application.

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**Messrs. ENDEAN AND CO., STOCK AND SHARE**

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ESTABLISHED 1861.

Bankers: London and Westminster, Lothbury, E.C.

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**MR. ALEXANDER DAVIDSON,**

STOCK AND SHARE DEALER,

## Registration of New Companies.

The following joint-stock companies have been duly registered:—

**THE "STANDARD" FIVE-MAIN ELECTRIC LIGHTING AND CONSTRUCTION COMPANY (Limited).**—Capital 500,000*l.*, in shares of 5*l.*. An electrician's business in all branches, and in conjunction with certain patents. The subscribers (who take one share each) are—D. T. Moad, 19, Earl's Court-square; J. T. Bowden, Beckenham; J. Weatherby, 4, Dunstan Buildings; E. Coventry, 1, Corn Exchange Chambers; W. L. Cole, 5, Stamford-road; A. G. Dickson, Waldershare Park; A. B. Bowden, 34, Leadenhall-street.

**THE LONG EATON WEST END MILL COMPANY (Limited).**—Capital 9600*l.*, in shares of 80*l.*. To erect a factory and carry on in Derbyshire a lace manufacturing business. The subscribers are—F. H. T. Horley, Long Eaton, 20; J. C. Taylor, Long Eaton, 8; W. Wallis, Long Eaton, 15; S. Eden, Long Eaton, 7; A. Crane, Long Eaton, 8; J. Winfield, Long Eaton, 10; F. S. Lawson, Long Eaton, 10; E. T. Horley, Long Eaton, 10; R. Fletcher, Long Eaton, 13; F. P. Norris, Long Eaton, 17.

**THE LONDON AND COUNTRY CLUBS (Limited).**—Capital 60,000*l.*, in shares of 5*l.*. The establishing and maintaining clubs in various parts of the United Kingdom. The subscribers are—J. Ball, Dulwich Grove, 10; J. Branson, 63, Ladbroke Grove, 5; H. F. Lewis, East Dulwich, 5; H. P. Shield, 28, Strand, 10; B. Lazarus, 1, Bloomfield-terrace, 100; H. Jordan, 1, Finchley-road, 5; T. Keen, 52, Prince of Wales-road, 1.

**THE JAY IMPROVED MARINE PROJECTILE COMPANY (Limited).**—Capital 40,000*l.*, in shares of 10*l.*. To acquire, use, sell, or otherwise dispose of certain patents and licenses. The subscribers (who take one share each) are—J. L. Jay, 53, Parliament street; T. Nordenfelt, 53, Parliament-street; P. Thaine, 4, Waterfield-terrace; F. H. Garrett, 34, Colville-terrace; A. Wilpersfarre, 53, Parliament-street; G. R. Jeffler, 158, Dalston Rise; J. Ketcher, 2, Ryder-terrace.

**PORT OF PLYMOUTH STEAMSHIP COMPANY (Limited).**—Capital 26,500*l.*, in shares of 100*l.*. A shipowner's business in all branches. The subscribers are—J. A. Bellamy, Plymouth, 5; T. Buttol, Plymouth, 9; W. Evans, Plymouth, 5; L. Allport, Plymouth, 2; J. B. Pinkham, Plymouth, 2; T. B. Harvey, Plymouth, 5; J. Taylor, Plymouth, 2.

**THE WILKINSON PATENT PAVING COMPANY (Limited).**—Capital 5000*l.*, in shares of 5*l.*. To acquire and use certain patents for the production of railway sleepers, paving blocks, sanitary pipes, slabs, &c. The subscribers are—E. Lindsay, 63, Queen Victoria-street, 10; W. Webb, 6, Essex-street, 10; A. T. Hawkins, 2, Dowgate-hill, 5; E. E. Cronk, 12, Pall Mall, 10; E. S. Cavell, 11, Waterloo-place, 10; E. Palmer, 7, Tressellian-crescent, 10; F. Cronk, 12, Pall Mall, 5.

**ANGLO-AMERICAN STEAMSHIP COMPANY (Limited).**—Capital 200,000*l.*, in shares of 100*l.*. A shipowner's business in all branches. The subscribers (who take one share each) are—W. H. Thompson, Bolton; C. Furness, West Hartlepool; W. Pinkney, Sunderland; W. M. Roche, Sunderland; T. W. Pinkney, Sunderland; S. C. Howarth, Bolton; J. D. Botterell, 101, Leadenhall-street.

**THE NATIONAL BANK OF AFRICA (Limited).**—Capital 2,000,000*l.*, in shares of 10*l.*. The various operations of a banking and a trading company. The subscribers (who take one share each) are—H. E. Smith, 9, Holywell-row; T. Hancock, Rotherhithe; J. Smith, Haggerston; T. Lister, 108, Shacklewell-lane; H. A. Baker, Stoke Newington; D. P. Scanlan, 5, Suffolk-road; H. Dickson, 299, Tabard-street.

**THE GOLDEN CHEROKEE MINING COMPANY (Limited).**—Capital 105,000*l.*, in shares of 1*l.*. To adopt and perform an agreement made between R. L. Southern of the one part and F. Jackson as a trustee, for the acquisition of certain mining or other rights and concessions situate within the district of Chindrass Gorninchi Ladang, in the territory of Johore, Malay Peninsula, for the term of 25 years, paying a royalty of 5*l.* per cent. of the products, and a sum of \$20 monthly from commencing operations, which will be those usually connected with gold and silver mining in all branches. The subscribers (who take one share each) are—J. S. Campbell, 1, Queen's Gate Place, Retired Indian C.S.; G. Brokelbank, Anerley, no occupation; W. N. Molesworth-St. Aubyn, 1, Brick Court, M.P.; E. N. Binney, 19, Cullum-street, no occupation; R. L. Southern, 19, Cullum-street, merchant; K. Jones, 11½, Union-court, merchants; F. Clark, 116, Westmoreland-road, clerk. The following are the first directors:—Messrs. Campbell, Brokelbank, Molesworth-St. Aubyn, Binney, and T. Shelford; the number not to be less than three or more than seven. Future directors' qualification 200 shares.

**THE SURREY ORLEANS CLUB AND ATHLETIC GROUNDS COMPANY (Limited).**—Capital 10,000*l.*, in shares of 1*l.*. To establish and maintain a club-house, reading-room, recreation grounds, &c. The subscribers (who take one share each) are—G. Wilson, Brixton; A. Tindall, 53, Chancery-lane; J. P. L. Hopwood, Peckham Rye; J. Day, East Dulwich; A. A. D. Lestranger, 4, Park-place; H. Elliott, Stoke Newington; B. Dowell, Hammersmith.

**THE BELMONT CONSOLIDATED GOLD MINING COMPANY (Limited).**—Capital 150,000*l.*, in shares of 1*l.*. To purchase, or otherwise acquire and work gold and silver mines, minerals, and mining rights in the United States or elsewhere, and personally to carry on the business of mineral mining proprietors and smelters, erecting all the necessary works, plant, machinery, &c. To adopt and carry into effect an agreement made between A. S. Winn of the one part, and this company of the other. This agreement has not been registered. The subscribers (who take one share each) are—F. C. Windsor, Leyton, accountant; W. J. Hammond, 8, Essex-street, clerk; W. E. Keymer, Canonbury, gentleman; A. Gilman, 156, Church-road, gentleman; E. W. Hammond, 42, Knowles-street, printer; T. Oxenham, 4, Springdale-road, gentleman; R. Ager, Crouch Hill, artist. The following gentlemen form the first board:—Major-General W. R. Alexander, W. W. Cragg, E. T. Gourley, A. Stewart, J. Walker, and O. Webb. The number must not be less than three or exceed seven; qualification, 100 shares.

**GRIQUALAND PUBLIC WORKS COMPANY (Limited).**—Capital 35,000*l.*, in shares of 10*l.*. To acquire the rights of the Griqualand West Railway and Waterworks Company (Limited) and those of the Kimberley Waterworks Company (Limited), and carry on the business connected therewith respectively. The subscribers (who take one share each) are—J. M. Macdonald, 95, Harley-street; M. Macdonald, 33, Nicholas-lane; G. B. Hamilton, 2, Cushion-court; R. Ogle, West Croydon; G. F. Smith, 86, Cannon-street; W. Anderson, Sydenham; G. P. Balfour, 2, Cushion-court.

**BRITISH ALLIANCE LAND COMPANY (Limited).**—Capital 200,000*l.*, in shares of 10*l.*. The business of a land and building company in all branches. The subscribers (who take one share each) are—W. Green, 35, Spring Gardens; F. J. C. Hackett, 35, Charleville-road; T. Whitehead, 2, Dowgate Hill; J. Black, Shepherd's Bush; B. W. Jones, 11, Queen Victoria-street; E. Smithson, 26, Cambridge-place; J. E. Woolcott, 35, Spring Gardens.

**THE WEST LEIGH SLATE AND SLAB QUARRY COMPANY (Limited).**—Capital 12,000*l.*, in shares of 1*l.*. To acquire by purchase or otherwise certain quarries, minerals, and lands in Devonshire, known as "Middle Slade Sarcombe," situated in the parish of Harberton, and the quarrying, working, winning, blasting, and manufacturing slates, slabs, stone or minerals, &c. The subscribers (who take one share each) are—A. Tucker, Harberton; R. E. Bounce, Totnes; T. H. Pennett, Harberton; W. M. Berry, Totnes; H. Stevens, Hazeldene; E. Sucker, Ashburton; T. Chiller, Totnes.

**THE GERMAN FUEL SAVING COMPANY (Limited).**—Capital 10,000*l.*, in shares of 1*l.*. To acquire and use certain patents in connection with apparatus for the introduction of a mixture of steam and air into spaces in which combustion takes place. The subscribers are—Lord Headley, 7, Astwood-road, 1000; F. S. Hunt, 7, Cromwell-road, 1; J. G. Cope, 3, Great George's-street, 1; J. Livesey, 9, Victoria Chambers, 1; J. R. Kemp, 38, Newbridge-street; G. T. M. White, 34, Chancery-lane, 1; T. D. Evans, 23, Prince's-street, 1.

**THE LONDON TRUST AND AGENCY COMPANY (Limited).**—Capital 50,000*l.*, in shares of 10*l.*. To transact every description of exchange, commercial, mercantile, and financial business either as principals or as agents. The subscribers (who take one share each)

are—R. B. O'Rourke, 34, Highbury Grange; C. A. Powell, Finsbury Park; F. E. Withams, 27, Watling-street; K. Powell, Lewisham; M. H. Arundel, 3, Mildmay Park; F. L. White, 95, Highbury Quadrant; F. A. Fosset, 93, Gracechurch-street.

**THE ANGLO-CANADIAN LAND COMPANY (Limited).**—Capital 500,000*l.*, in shares of 10*l.*. A land company's business in all branches. The subscribers (who take one share each) are—W. J. McH. Mellis, 104, Fore-street; J. B. Malcolmson, East Barnet; L. Salomons, Mayfair; G. Muffatt, 6, Lime-street; J. Hubbert, West Kirby; F. Stanciliffe, Montreal; J. B. Davison, Kew.

**THE CANKIM BAMOO GOLD MINES (Limited).**—Capital 100,000*l.*, in shares of 1*l.*. To adopt and carry into effect an agreement made between the British Trading Company (Limited) of the one part, and C. R. Gibb, as a trustee, relating to the purchase of the lease of a certain property situate in the district of Axim, Gold Coast, for the sum of 60,000*l.*, 27,000*l.* of which by cash and the balance in fully-paid shares, for the purpose of carrying on the various operations in connection with mining for gold and other minerals. The property is well wooded, has the benefit of several water-courses, and covers in extent about a square mile. The subscribers (who take one share each) are—J. Murphy, Highgate, manufacturer; H. Elliott, 62, Dowgate-hill, clerk; W. Lichfield, sen., gentleman; H. Mason, 49, Peckham-grove, clerk; W. Taylor, 53, Gaysford-street, shorthand writer; J. Edney, 116, Manor-place, clerk; W. H. Scales, Stratford, clerk. The first directors are—Sir Rose W. Price, Bart., Messrs. W. H. Peel, J. Croyle, Captain Bellis, and R. B. N. Walker. The qualification of future directors is fixed at 100 shares. Remuneration 700*l.*, to be divided, and 5 per cent. on profits, after payment of 10 per cent. to the shareholders.

**SIR W. G. ARMSTRONG AND COMPANY.**—To acquire and carry on a long established business of engineers, ordnance, and ammunition makers, contractors, &c. (This company is unlimited.) The subscribers (who take one share each) are—Sir W. G. Armstrong, Elswick; A. Noble, Elswick Works; W. D. Cruddas, Elswick Works; P. G. B. Westmacott, Elswick Works; H. O. Rendel, Elswick Works; S. Rendel, 16, Kensington Palace Gardens; Lord Sudeley, 7, Buckingham Gate.

**EDISON'S INDIAN AND COLONIAL ELECTRIC COMPANY (Limited).**—Capital 250,000*l.*, in shares of 5*l.*. An electrician's business, in conjunction with certain acquired patents, rights, &c. The subscribers are—Marquis of Tweeddale, 25, St. James's-place; H. Schlosinger, 5, Kensington Park Gardens; H. B. Weaver, Streatham; C. B. Beresford, Leytonstone; G. Warrender, Edinburgh; J. P. Linton, 87, Elsham-road; F. F. Gordon, 131, Sloane-street.

**THE ANGLO-AUSTRALIAN BRUSH ELECTRICAL COMPANY (Limited).**—Capital 500,000*l.*, in shares of 5*l.*. This company has secured the monopoly of the Brush system of electricity for Austria. The subscribers (who take one share each) are—W. A. Stevenson, Uxbridge; A. Saumarez, 17, Grosvenor Gardens; A. A. Slade, 3, Lyall-street; R. W. Hamilton, 1, Cadogan-square; S. J. Lunter, Queen Ann's Gate; G. B. Powell, 8, St. George's-place; C. F. de K. Stewart, 7, Collingham-road.

**THE EARL OF CHESTER STEAMSHIP COMPANY (Limited).**—Capital 17,500*l.*, in shares of 175*l.*. The purchase, owning, and working of said steamship. The subscribers (who take one share each) are—W. H. Martin, Cardiff; H. B. Marquand, Cardiff; W. P. Annear, Cardiff; J. T. Hutchins, Cardiff; T. H. Owen, Cardiff; A. Thornley, Cardiff; W. Blom, Cardiff.

The LIST OF APPLICATIONS will CLOSE on TUESDAY, the 20th, for LONDON, and on WEDNESDAY, the 21st instant, for the COUNTRY.

No cash will be paid by way of Purchase Money until trial workings shall prove a yield of not less than one ounce of Gold per ton of ore. All moneys payable to the Vendors will be held in trust until the value of the ore is certified.

## The Cankim Bamoo Gold Mines

(LIMITED).

GOLD COAST OF AFRICA.

CAPITAL £100,000, DIVIDED INTO 100,000 SHARES OF £1 EACH.

PAYABLE—1*s.* on application; 4*s.* on allotment, and the balance by calls of 2*s.* 6*d.*; not less than one month's notice being given of each call as required.

## DIRECTORS.

Sir ROSE LAMBERT PRICE, Bart., 75, Warwick Road, South Kensington (Chairman).  
WALTER H. PEEL, Esq., 6, Queen's Gate Terrace, South Kensington.  
JAMES CROYLE, Esq., Baltic Chambers, 108, Bishopsgate Street (Member of the Peruvian Bondholders' Committee).  
Captain BELLIS, Walham Green (late of Lagos, West Coast of Africa).  
\*R. B. N. WALKER, Esq., F.R.G.S.

\*Will join the Board after allotment as Consulting Director, having had upwards of 30 years' experience on the West Coast of Africa.

BANKERS—The ALLIANCE BANK (Limited), Bartholomew Lane, E.C.

SOLICITORS—EDWARD SMITH and CO., Abchurch Chambers, Abchurch Lane.

## AUDITORS.

Messrs. COOPER, WINTLE, and CO., Coleman Street Buildings.

Messrs. F. LUCAS, SON, and CO., 20, Great Marlborough Street, W.

SECRETARY—(pro tem.)—Mr. CHARLES RAMSAY GIBB.

OFFICES—PALMERSTON BUILDINGS.

## PROSPECTUS.

This company is formed to purchase and work the Cankim Bamoo Mines, recently acquired by the Apollonia Syndicate, with whom an agreement has been made of an unusually favourable character.

Cankim Bamoo, which is situate in close proximity to the coast, one mile from Sarlman (or Saihomen), and about 17 miles from Axim, has long been known as the most renowned mining camp of the Axim district. As will be seen by the map accompanying the prospectus there are a vast number of native pits sunk on the property, showing long and persistent working, and it is well known that whenever aboriginal workings are found to have existed on a large scale in any part of the world a rich harvest remains for those who come after with adequate machinery.

The port of Axim is only 23 days' steam from Liverpool, and there is a regular communication by steamer every fortnight, or oftener when inducement is given.

The term for which the lease of these mines has been granted is for 99 years, without royalty, at a rental of £100 per annum, renewable for a similar period should the then holders so desire it. The extent of the property is 2000 yards by 1600 yards, or rather more than a square mile.

The contract of purchase provides that from 20 to 50 tons of ore should be brought immediately to England, taken by an officer of the company, and should it be found that the ore taken in bulk from the mine does not at least average 1 oz. of gold to the ton, all the monetary payment will be forwarded to the company.

This stipulation is one the value of which will be appreciated, as showing the confidence of the vendors, and preventing the company from parting with money until they are assured on indisputable evidence that their property is one of very great value while the fact of having so large a quantity of the ore in this country will enable the directors to have the ores treated in a manner that will enable them at once to select the most suitable machinery, and thus avoid the delay and useless expenditure that have characterised most gold mining enterprises.

The samples of ore sent over to England were submitted to Mr. Claudet, assayer to the Bank of England, to whom they were sent direct in bulk. He found gold and silver in all the samples, and that as the depth increased so did the richness of the ore. From one-half of the whole bulk of the sample taken at a depth of 24 ft. Mr. Claudet obtained an average of 2 ozs. 5 dwts. of gold to the ton; the other half remains at the office of the company for inspection.

Although it is believed that the result of the assays given will be fully maintained, the following calculations are only based upon the supposition that the quartz produces but one ounce, or £3 10*s.* of gold to the ton; the alluvial deposit but 17*s.* 6*d.*

The result of crushing, washing, and amalgamating:—  
50 tons of quartz per day, at a yield of 1 oz. (say, £3 10*s.*)  
per ton for 200 days only, will give a gross profit per annum £45,500  
Deduct (say) 30*s.* per ton for working expenses (crushing, management, &c.) 16,000

£29,500  
250 tons of alluvial soil per day, at a yield of 5 dwts. (say, 17*s.* 6*d.*) per ton, for 200 days £43,750  
Deduct (say) 5*s.* per ton working expenses (hydraulic washing) management, &c. 12,500

£31,250  
Annual profit from treating quartz £29,500  
Annual profit from washing alluvial soil 31,250

Total annual profit £60,750

It must be stated that Mr. Wulken, in his report to the directors of the Apollonia Syndicate, says:—"As regards these samples I am sending to England there is no selecting done whatever. At the old incline I put in four blasts, and the stuff was put into sacks as it came to hand." Mr. Wulken is an experienced Californian miner, and the directors place great reliance on his integrity.

The property contains a supply of wood in abundance, and, as will be seen by the map, is intersected by a splendid stream of water, which latter greatly enhances the value of the property for hydraulic or placer working.

The great riches of the Gold Coast need hardly be insisted on; nevertheless, it may not be uninteresting to read the opinions of the experienced traveller, Captain Burton, and the well-known mining engineer, Mr. Oliver Pegler, who have recently returned from the district.

In a recent speech at the Society of Arts, Captain Burton, the well-known African traveller, observed:—"The good news, &c., we bring home is the prodigious wealth of the land. I know nothing to equal it in California or in Brazil. Gold dust is panned by native women from the sands of the seashore. Gold spangles glitter after showers in the streets of Axim. Gold is yielded by the lump of yellow swish that rivets the wattle walls of hut and house. These washings range from ½ oz. to 4 ozs. per ton. In California 9 dwts. pays. There, then, is the gold, and it will be our fault only if it remains there."

"During the last century this section of the West African coast annually exported to Europe between 3 and 3½ millions sterling of gold, in the shape of dust, nuggets, and bars. I see no difficulty in again raising the export of West Africa to the highest figure it showed during the last century, and I know no land better able to supply the measure required in England, to preserve the balance of the precious metals, than this old-new California, our neglected El Dorado, the Gold Coast."

"Mr. Oliver Pegler said his experience on the coast led him to the conviction that Captain Burton's statement on the question of the richness of the gold in the lagoon was exceedingly moderate. He had spoken of from 1 to 4 ozs. as being realised, but he had seen as much as 20 ozs. on some occasions. This was a country which extended over 100 miles, and the sands of every river contained gold. On his visit he made the best use of his time, and landed wherever the steamer touched, and for 1000 miles along the coast there were evidences of gold. The geological formation was eminently typical of gold, particularly the alluvial strata, and these alluvial deposits were so gigantic that the puny efforts of the natives in the past had made no appreciable impression upon them.

They only went to a very shallow depth, and rarely, if ever, tunnelled, though he had seen some open trenches. They dug down a little way, and then enlarged the hole until it fell in, and then the fetish man stepped in and made them leave the neighbourhood. In one place he came across some old mines, perhaps 20 years old, where the natives had gone down 50 or 60 ft., when evidently a large mass of earth had fallen in, and the working had been abandoned, but the richness at that depth was very striking. In one place he came upon 1000 or 2000 natives busily engaged on a small area of a few acres, working in gangs, day and night, washing for gold."

The execution of the lease is certified by the British District Commissioner, and has been sent to Cape Coast Castle for registration.

After allotment application for a settlement and quotation will be made to the Stock Exchange. Should no allotment be made, deposits will be returned without deduction.

Maps, prospectuses, and forms of application for shares may be obtained from the bankers, or of the secretary, at the offices of the company.

DISTRIBUTION OF 100 PER CENT. BONUS SHARES ON FIRST 6000 SHARES ISSUED.

# The New Terras Tin Mining Company

(LIMITED).

Incorporated with Limited Liability under the Companies Acts, 1862, 1867, 1877, and 1880.

CAPITAL £35,000, IN 17,500 SHARES OF £2 EACH.

2s. 6d. to be paid on application, 2s. 6d. on allotment, and the balance by instalments of 2s. 6d. per share, at intervals of not less than three months.

Should no allotment be made, the application money will be returned in full.

This company is promoted on mutual terms, the shareholders participating 100 per cent. in bonus shares, thus—For every 10 shares applied for and allotted bonus shares of same value will be given, whereby all such holders will participate mutually on their holdings.

With a view to economy, it is intended at the first general meeting of the shareholders to appoint a small committee of management, consisting of two or three of the largest shareholders who may be able to devote their attention to the working of the mine. The management will thus be in the hands of a few practical men instead of a board of directors, who usually know little or nothing of mining, and whose salaries and expenses unnecessarily add to the cost of working.

## BANKERS.

CORNISH BANK (Limited), Truro, Cornwall.

Messrs. SMITH, PAYNE, and SMITH, Lombard Street, London.

SOLICITOR—J. R. PAULL, Esq., Truro, Cornwall.

MANAGERS—Messrs. JAMES and Co., Grampound Road.

SECRETARY—Mr. A. C. BURNS (pro. tem.)

OFFICES—GRAMPOUND ROAD, CORNWALL.

## ABRIDGED PROSPECTUS.

This company has been re-established on mutual terms for the re-working of Terras Mine, a valuable and extensive property situate in the St. Austell district, which it is stated has returned fully £20,000,000 worth of metallic ores.

This is undoubtedly one of the best mines in Cornwall or Devon. The estimated amount of tin ground to operate on at once is over 200,000 cubic fathoms, and which, at the present price of tin, would give a profit of £550,000. Fredrick Ashwell, C.E., of Truro, and Captain Henry James, of Redruth, estimate the extraordinary tin course, which traverses the entire length of the sett, which is nearly 40 ft. wide, to give 220,000 cubic fathoms in reserves, which, judging from the average produce of what has already been broken, and a fair trial made, to be worth the sum of £550,000 which probably exceeds the value of reserves of any tin mine in Cornwall. The profits to be realised, if due economy be observed, amounts to no less a sum than £275,000, whilst the yield increases in depth.

It is proposed to erect plant which will be capable of returning 50 tons of tin ore per month, and this at a profit of, say, £25 per ton, will give £150,000 a year, or over 50 per cent. per annum on the entire capital.

Copies of Agreement, Memorandum, and Articles of Association of the Company, can be inspected at the Offices of the Solicitor of the Company.

Prospectuses and Forms of Application for Shares, can be obtained at the Offices of the Company, and from the Bankers.

## CLOSING OF THE SHARE LIST.

The CLOSING of the LIST will TAKE PLACE on or before THURSDAY, the 29th instant, and those who have not sent in their Applications should lose no time in applying in order to secure an Allotment.

## WATSON BROTHERS' MINING CIRCULAR.

WATSON BROTHERS,

MINEOWNERS, STOCK AND SHARE DEALERS & CO.  
1, ST MICHAEL'S ALLEY CORNHILL, LONDON

The late Capt. Charles Thomas, of Dolcoath, one of the greatest mining authorities of his day, directed attention to three leading features in profitable mining phenomena—1. The geological character of the locality.—2. The general appearance, contents, and size of the lodes.—3. Their bearing or direction. But as it was more easy to say in what strata a mine would not be found profitable than to say where it will, he said in regard to No. 1 that no profitable mine was ever found in moorstone, or primitive granite, such as is found in high hills with projecting tops—as Carn Brea, Carn Neath, Caradon Hill, Kit Hill, Rough Tor, &c. At the sides of these hills another kind of granite is found, but in the primitive granite "no mine of any kind yielding a profit has ever been discovered." Good tin mines are generally found in secondary granite, or in very quartzose or micaceous clay-slate, connected or unconnected with elvan. With regard to No. 2, he says, in his remarks on the geology of Cornwall and Devon—"A gossan of a fair size is an excellent guide, and almost a certain one for ores not far below the surface. They are not always found directly under the gossan however, but often at a short distance east or west of it." Gossan of the genuine sort must have plenty of friable quartz in it. As to No. 3, the direction or bearing of a lode is of great importance, a lode taking an erratic course never making a profitable mine. Copper lodes should range from 10° north to 50° south of east (but it is also well known that some of the richest lodes in Cornwall have been *counters*, that is, lodes running north and south, or contra to the recognised rule). Whatever may be the cause, he says, of metalliferous deposits, occurrences in his experience declare in unmistakable language that they have not been thrown up from beneath, and the miner will spend his money in vain in attempting to explore impenetrable and barren rock. Whether lodes are found in granite or killas they will not be found productive unless intersected by elvan or cross-courses.

East Blue Hills sold for the four weeks 2 tons 14 cwt. of tin for 154l. 7s. Would have sold more had there been more stamps at work.

There was a slight mistake or clerical error in the remarks on West Crebor. It should have been the lode for some fathoms had been 3 ft., and had increased to 5 ft. wide.

A shareholder in a Cost-book mine is not liable for moneys borrowed, or for overdrawn accounts at bankers by pursers or agents, unless they are fully authorised to borrow by a special resolution of the shareholders. We object to all borrowing; calls should be made to meet the liabilities, and enforced from those in arrears. In June, 1847, an important case bearing on this point of borrowing was tried in the Court of Common Pleas—Ricketts v. Bennett—and decided before the Judges in Appeal. Ricketts were bankers in Penzance, and sued Bennett, a shareholder, for the balance of an overdrawn account of the purser of Wheal Providence. The bankers lost their action, and it was clearly decided that one of several co-adventurers in a mine has not as such any authority to pledge the credit of the general body for money borrowed for the purposes of the concern, and the fact of his having the general management of the mine makes no difference in the absence of circumstances from which an implied authority for that purpose can be inferred. The usual course in relinquishment of shares is to pay up the proportion of debt to the end of the month in which the shares are relinquished; and on payment of this no further liability can attach to the party relinquishing. His proportion of the value of materials he could claim in two years, and they had to be valued by two valuers, one for the company, and one for the shareholder relinquishing. In 1853 an important case was argued and decided before the Lords Justices Knight Bruce and Turner, and Lord Chancellor Cranworth. A shareholder had sent in a relinquishment of his shares according to the rule of the Cost-book; the company was very soon afterwards wound-up,

and the shareholder's name was placed on the list of contributories. The Judges removed his name with costs against the company.

At Morfa Du the lode in Ida shaft is worth 4 tons of blue stone and 3 tons of copper ores per fathom, and a most important point is that in 14 fathoms driving a deeper level will come under this.

At Parys Copper there is an improvement at the 90 west in No. 2 and also in the 90 east.

The market has been pretty well cleared of Prince of Wales shares, and a discovery may be made soon. Can't answer the other question at present.

## THE WILD DUCK, OR SPORTSMAN'S ARMS.

"Well," says Old Tom, "thee cust think what thee's mind to, Jan Temby; but to my mind thee's nothing purtier or fittier in this world than a good dinner, and a good drop of drink afterwards in comfort and quietness." "But what," said Jemmy Dowa, "will the teetotalers say about the drink?" "They may say what they mind to," says Old Tom; "but I look upon a teetotaler as not knowing half so much as my old boss—for old Punch, when he had enuff will stop, and you can't make up take a drop more, but a teetotaler don't know, like a boss or a bullock, when he had enuff, or when to stop. So I say a good dinner and a moderate good drink, after a week's hard work, is the most comfortable thing in the world." "Now you are all settled and at ease," says Cousin Will, "I would like to say a word or two about 'lords' dues in mines.' We hear frequent complaints on this subject, but it appears to me the fault rests entirely with the adventurers in mines—for it is a dead certainty that the lords will not or cannot work the mines; consequently, if the adventurers refused to do so unless they obtained fair and equitable terms there is no doubt, in my opinion, but they would be fairly met by the lords. For instance, we have lately seen started East Wheal Rose, Old Shepherds, Great Polgoth, Tresavean, &c., the working of which will require the outlay of tens of thousands of pounds before it is possible to realise any profit. Now, when agreeing for the leases of those mines if the parties thereto made it a *sine qua non* that no dues should be paid until all outlay had been repaid, and then only in *bona fide* profits, I think that the lords would have agreed to the terms; but did any of the lessees of these old mines insist upon these terms? If they did that, then there is no person to blame but themselves." "You are quite right," says Uncle Henney; "it is the fault of the adventurers, and nobody else—and no lease should be taken of old or new bala but on the terms you name, Cousin Will, and depend upon it let 'One and All' join together, and the lords would soon listen to reason." "Well, Old Tom," says Jan Jewill, "hast a any news about the institutions? Have they stopped the tin yet going down the Red River, or made some wonderful discoveries?" "Why, Jan," says Old Tom, "tes very easy to axe questions; but to tell what discoveries the Camborne Institutions made will take a cleverer man than I shall ever be—but some say they are so grand that another young institution is to be planted up to Troon." "Troon," says Uncle Henney; "why I can mind when theer wor only four old thatched houses, with green gutters before the doors, and turf-ricks in the middle of the town place in Troon, and only two houses in Troon Moor—Old Skeze Pascoe's and Uncle Stee Temill's." "I can mind it too," says Jan Temby; "but some say that 2000 people now live in Troon, and sure enuff they should have a little institution of their own as well as Camborne." "Ded ee ever mind Old Joe H—g, tinker, living in Troon Sose." "Jas," says Uncle Henney, "I knowed Old Joe very well." "I wonder," says Jan, "how a got the nickname of 'Tinker'?" "I'll tell ee," says Uncle Henney; "Old Joe was working in Cook's Kitchen in old Capt. Joe Vivian's time, and one day Old Joe was put to dreeve a shallow level towards a privy. After some days Capt. Joe said 'How art a getting on, Joe; has a cut the lode yet?' 'No,' says Old Joe; 'but I'm sure I'm getting near,' for there's a party 'keenly tinker' in the back of the end." "Throw to un," says Capt. Joe, "for thee art sure to have a bundle of a lode very soon;" and so a had, and wor nearly stoffocated in the bargain, and that wor the way the poor old fellow got the nickname of 'tinker'; and there are scores of conceited young miners going

about now dressed up in their best clothes every day who don't know a true 'tinker' of a lode from Old Joe's tinker." "That's very true," says Jemmy Dowa; "and I should like to know what all the hundreds and thousands of the young dandy miners mean to do with themselves? Tes shameful go which way you will of an evening to see droves of young beardless puppies thronging the streets with butt-ends of cigars or short pipes in their mouths, like pigs carrying straws in their mouths before a flood of rain." "Why, Jemmy," says Jan Temby, "didn't ee hear the news what is going to be done for all the dandy miners of Camborne?" "Not a word," says Jemmy. "Well then," says Jan, "I'll tell ye. They poor young fellows are worked so hard in deep levels and poor air, and have only eight hours in the 24 they don't know what to do weth, that some kind-hearted old ladies are going to subscribe money to purchase a park on purpose for a pleasure ground for them near Camborne, where they will have cricket matches and all sorts of games, bands of music, and everything that is invented for their amusement and recreation, and especially for the benefit of their health, as the old ladies are afraid that unless they have pure air and exercise the 'eight hours' severe work killing time will carry off hundreds in a galloping consumption." "I'll tell ye a plan," says Old Tom, "for a trifle that will give them health and strength, and make men of them fit for anything. Instead of the old ladies laying out heaps of money, buying a park and pleasure ground, I would only ask for a trifling sum to purchase 600 pair of small bellows. Then once a week I would march 1200 of the hard worked young miners in separate companies of 100 each, some to the top of Bicken Hill, some to Carn Entral, Bolenowe Cairn, Nine Maidens, Hangman Burrow, &c. When arrived on the top of those hills each company of 100 men should form a ring, and at the word of command they would begin to march round and round with the sun, every man with his mouth so wide open as he could spread it. Every second man would have a bellows blowing a blast of air into the man before him, so that taking in fresh air in front and rear each man would have both air and exercise sufficient for a week; and after marching round and round with the sun, and the front men were filled with air, orders would be given to march round against the sun, so that the rear man gets a bellyful of fresh air as well as the front man. After this gentle exercise every man would return home happy and comfortable, and ready to bust with fresh air." "Theirn, Old Tom," says Uncle Henney, "is no doubt a cheap plan to get fresh air and exercise; but in our rearing we wor never at a loss for one or other. We had no time to idle, for after coming home from bal and had a bit of something to eat we had plenty of air and exercise hacking up and hedging in old stoney downses, and by hard and constant labour we have now little farms and houses of our own over our heads; and I would advise all the young dandy miners who want air and exercise to try my plan first, Old Tom. Let every man hack and hedge in one acre of downs every year, and 'twill pay him better than cricketing or any other game; but if this is too mean an occupation for young miners we have scores of miles of lodes near us never touched yet, and when opened and worked will make as good bala as any we have working. Now, let all young men who want air and exercise go in pares east, west, north, and south costeaning, and it will pay them much better than looking at other people doing nothing. Besides, smart intelligent young miners thus employed could but fail to make important and valuable discoveries." "I endorse every word just spoken by Uncle Henney," says Cousin Will; "but as Old Tom's plan is a novel idea I propose that we have the best bowl of punch Becky can make before we part." This was agreed to, and a most pleasing meeting terminated.—From Cousin Jack's Unpublished MSS.

## GREAT WESTERN ELECTRIC LIGHT COMPANY.

An extraordinary general meeting of shareholders was held at the City Terminus Hotel, on Wednesday, for the purpose of confirming the resolutions passed at the extraordinary general meeting held on May 3.—Mr. H. RUSSELL EVANS occupied the chair by the consent of the meeting, and among those present at the board were Messrs. James Whitehead, Maudsley, Southern, and Captain the Hon. Fred. Greville.—The SECRETARY having read the minutes of the last meeting, which were confirmed,

The CHAIRMAN said that the special meeting was held that day for the purpose of confirming resolutions passed at the last meeting, and these resolutions were to be passed in order to comply with the requirements of the Stock Exchange before that body would grant them a settlement and quotation. The alterations were, to a great extent merely verbal and technical, and he would read the resolutions, which were as follows:—"That section 40 of the Articles of Association of the Great Western Electric Light and Power Company (Limited) be, and the same is hereby struck out and expunged from the said articles, and the same articles shall read and be construed as if the said section 40 had never been inserted therein." 2. "That the words 'or the person entitled to the share by transmission, as the case may be,' in section 41 of the said articles be, and the same are hereby struck out and expunged from the said articles, and the said section 41 of the same articles shall read and be construed as if the said words had never been inserted therein."

Mr. RYMONDS seconded the first resolution, and the other was seconded by Colonel SHAKESPEARE. Both were carried unanimously and the Chairman formally declared the meeting at an end.

## STATUTORY MEETING.

A statutory meeting was held immediately afterwards, when Mr. Evans was again formally voted to the chair. He said the meeting was held merely to comply with the Act of Parliament. He might tell them that of course they had not allotted any shares for very many weeks, although they had done a great deal of business. They had sold the concession for Devon and Cornwall for 15,000l., and they had some important negotiations pending with regard to the sale or some arrangement for other portions of their district. They had a proposal between them for a central station for Bristol, where they would be doing very extensive business immediately they could secure a suitable site for a station. They had selected a central station for Cardiff, so that they would be able to go on lighting there immediately. Premises at Newport had been offered them, which he thought would be particularly suitable for a central station, and where they would, he thought, be doing a very considerable business soon. They had negotiations pending in other towns, and he thought the prospects of the company were of the most favourable character. There could be no question whatever that the electric light would be most certainly the illuminator of the future. He did not think he could enlarge upon the matters, but he would be most happy to answer any questions. The secretary would always be pleased to give any information as to what the company was doing.

No questions having been asked, a vote of thanks was given to the Chairman and board. The CHAIRMAN, in response, said he thought it was a good proof that the shareholders were satisfied with the way in which the work had been done, as there were not many shareholders present, and he hoped everything would still go on satisfactorily. He might mention that the board had appointed a manager, and they had also got a practical electrician, and that they were proceeding with the work as fast as they possibly could. (Cheers.) The proceedings then terminated.

CARBONS FOR ELECTRIC LAMPS.—The invention of Messrs. JAMES and LEE, of Ravenhend, Beckenham, relates to a process and apparatus for the manufacture of carbons for electric lamps in such a manner as to obtain great density and uniformity in their constitution. For this purpose they reduce the carbonaceous material to a fine powder, and this they mould under very great pressure applied laterally to the cylindrical or polygonal form desired. The press which they employ is thus constructed:—In a strong plate they form a number of longitudinal slots, each of the length and width desired for a carbon. In these slots they fit lower and upper punches, the faces of which are hollowed each to the profile of the half section of the carbon. Both these punches are attached to heads that are moveable in vertical guides subject to hydraulic or other suitable powerful pressure. The upper punches being withdrawn above the plate and the lower punches being drawn somewhat down in the slots but not out of them, the pulverulent material is charged into the slots, and thereupon the lower punches are caused to ascend and the upper punches to descend, squeezing the material between them to the desired form. The upper punches then being withdrawn while the lower punches are caused to ascend, the moulded carbons are thrust upwards to the top surface of the mould plate, and thereupon a number of quills fitted in holes in the lower punches are pushed upwards so as to thrust the moulded carbons off the punches. In some cases they mould the carbons with a fin projecting along each side. These fins may be ground off if desired, or they may be retained on the carbon and may be serrated if desired for feeding the carbon in the lamp.

## CLOSING OF THE LISTS.

## THE WASSAU (GOLD COAST) MINING COMPANY (LIMITED).

Notice is hereby given, that the LISTS OF APPLICATIONS for SHARES will be CLOSED on MONDAY for LONDON, and TUESDAY, the 20th instant, for the COUNTRY.

# The Wassau (Gold Coast) Mining Co.

(LIMITED).

Incorporated under the Companies' Act, 1862 to 1880, whereby the liability of the Shareholders is strictly limited.

CAPITAL £100,000, IN 100,000 SHARES OF £1 EACH.

Of which 33,300 are reserved in part payment to the Vendors, and the remainder are now offered for subscription at par. PAYMENT AS FOLLOWS:—2s. 6d. per share on application; 7s. 6d. on allotment; 5s. on the 1st of August, and the balance as required subject to three months' notice.

## DIRECTORS.

CHARLES E. LEWIS, Esq., M.P., Director of London and Provincial Bank (Limited).  
JOHN SILVERLOCK, Esq., Merchant, Rood Lane, Director East and West India Dock Company.  
CHARLES ROYAL DAWSON, Esq., Grange Park, Ealing (late Manager South-East Wynaad Estates and Gold Mining Company (Limited)).

\*FRANCIS SWANZY, Esq., } Firm of F. and A. Swanzy,  
\*FREDK. JOEL CROCKER, Esq., } African Merchants.

(With power to add to their number.)

\*N.B.—Will join the Board after allotment.

BANKERS—The CONSOLIDATED BANK (LIMITED), 52, Threadneedle Street, E.C.

SOLICITORS—Messrs. SOLE, TURNER, and KNIGHT, 68, Aldermanbury, E.C.

BROKERS—Messrs. ELLIS and CO., 2, Royal Exchange Buildings, E.C.

CONSULTING ENGINEER—C. J. HARVEY, Esq.

AUDITORS—Messrs. MURDOCH and NORSWORTHY, 80, Cornhill, E.C.

OFFICES—147, CANNON STREET, LONDON, E.C.

SECRETARY (pro tem.)—F. S. SYMONS, Esq.

## PROSPECTUS.

This company is formed for the purchase and further development of a valuable and extensive property, situated in Wassau, the western province of the Colony of the Gold Coast, and now being worked by Messrs. F. and A. Swanzy, the well-known African merchants.

Wassau is some 60 miles from the port of Axim, which is reached in about three weeks by fortnightly steamers from Liverpool. Communication from Axim is by river, up to within about 30 miles, whence land carriage is comparatively easy.

The house of F. and A. Swanzy has long been established on the Coast and in London, and gold dust to the value of upwards of one million sterling has passed through its hands from this neighbourhood alone, under the primitive mode of barter still practised by the natives.

Being satisfied that all this gold, together with the large quantities imported by other persons, must have come from reefs, which only required skilled prospecting to discover, Messrs. Swanzy, about four years ago, engaged an experienced engineer, caused a careful examination of the country to be made, and eventually secured the estates now proposed to be transferred to the present company.

Large sums of money have been expended upon the development of the property, as well as in building the village of Crockerhill, erecting three engines, 12 heads of stamps, steam pump, saw frame and saw bench, supplying tramway rails, wagons, tools, materials, and other mining equipment. Finding, however, the further outlay of time and money required for thoroughly developing the estates on a fitting scale, to be beyond the ordinary resources of a mercantile firm, they have resolved to offer the property in its present position as a going concern to a company (reserving to themselves as large an interest as possible), on such terms as will invite the co-operation of shareholders desirous of subscribing to a bona fide mining undertaking. It need hardly be pointed out how immensely superior is the position of a company like this, when compared with that of an enterprise which has to face the immense expense and delay of having to provide its buildings and machinery, as well as to organise its staff.

The property comprises in all about 1800 acres of land, held under lease, together with the above-mentioned buildings, machinery, &c. About 1500 acres are held under a lease, of which 77 years were unexpired in June last, and the balance of about 250 acres under one of 99 years from January, 1882.

Two valuable reefs run through the property, whilst others will, doubtless, be found upon a further examination of the coast. One is known as Crocker's reef, and is from 4 to 5 ft. thick. It appears to run through the greater portion of the property. Two shafts have been sunk on Crocker's reef to a depth of 70 to 80 ft., and its value as an auriferous vein has been established beyond doubt. A bulk sample from this reef, assayed by Messrs. Johnson, Matthey, and Co., gave a result of 3 ozs. 7½ dwts. to the ton of ore. The other reef, running in a parallel direction, is from 4 to 25 ft. thick, and being nearer the river can be worked with less expense. As very rich quartz has been discovered in the course of sinking it was intended to open up Crocker's reef, but as the present pump proved insufficient, and rich lodes of alluvial deposits had been found which could be more easily worked, the operations on this reef were suspended. Shafts were then sunk on the Aja Bipa lode to a depth of from 35 to 45 ft. only, with this result, that 50 tons of ore fairly taken and crushed at Crockerhill produced 41 ozs. gold of standard quality and 11 tons sand from the strakes, which assayed, according to Messrs. Johnson, Matthey, and Co.'s report, 5625 ozs. to the ton, the whole being equal to 2 ozs. gold per ton of ore crushed. This lode is ascertained to be from 2½ to 30 in. thick, and it is estimated that the company will have over 2500 running feet of work upon, and that to a considerable depth before reaching the water level.

Samples of the Aja Bipa ore, as also some very rich samples of quartz from Crocker's reef, can be seen at the offices of the company. Exceptional facilities exist for working the mines, the supply of timber is practically inexhaustible, natural streams conveniently situated for reduction purposes run through the estates, and native labour is readily procurable at low rates. The directors, therefore, feel convinced that with but little further outlay and economical management these mines are capable of yielding large returns. It would be easy to quote figures showing by simple calculations that enormous profits can be realised on certain data, but the directors prefer to leave investors to form their own conclusions from the above statements.

In regard to transit to and from the port of Axim, it is expected that ere long a light railway will be constructed from the coast to this mining district, and an engineer has already been sent out by a syndicate to make a survey with that object. It is also important to remember that mining operations can be carried on throughout the entire year.

## FOREIGN MINES.

**ALAMILLOS.**—June 7: In the 29, driving west of San Martin shaft, a good length of ore ground is being opened up at a cheap and rapid rate, worth 1 ton per fathom. In the 60, driving east of San Felipe's shaft, has fallen off in value to ½ ton per fathom. In the 40, driving west of San Felipe's shaft, there is a strong, well-defined, and productive lode, worth 1½ ton to the fathom. The 40, driving east of San Felipe's shaft, has been holed. The lode in the 60, driving east of San Enrique's shaft, is further reduced in value to ½ ton per fathom. An improvement has taken place in the 130, driving east of Taylor's engine-shaft, the lode being worth 1½ ton to the fathom. The 130, driving west of Taylor's engine-shaft, is also looking better than it has been for some time past, being valued at ½ ton per fathom. In the 80, driving east of San Victor's shaft, there is a very powerful and productive lode, worth 2 tons per fathom. The lode in the 50, driving in the same direction, is very regular, and contains good stones of ore. The 18, driving west of San Victor's shaft, has improved to 1 ton per fathom. In the 80, on middle lode, the ground is hard, and the lode small and poor. Paying ground is being opened up in the 50, west of San Victor's shaft, worth ½ ton per fathom. The lode in the 70, driving west of San Victor's shaft, is small and unproductive. There is no change in the 80 cross-cut, driving south of Judd's engine-shaft. Diaz winze, sinking below the 70, is down to the 80. Amann's winze, sinking below the 60, is holed to the 70; the lode is worth 1½ ton per fathom. Linas winze is being sunk below the 70 in a very wide and productive lode, worth 3 tons per fathom. The weekly weighings of ore were continued very regularly throughout the past month, and the stops, as a rule, are yielding fairly well at present. The ordinary works at surface are going on satisfactorily, and the steam-engines are in very good condition. We estimate the raisings for June at 200 tons.

**BIRDSEY CREEK GOLD.**—The directors have this day received the following telegram from their superintendent, Mr. J. S. Goodwin, June 12: We have cleared up at 3000 and West and Red Dug. The gross return is \$17,000. I send you a remittance of \$7000.

**BROADWAY GOLD.**—J. W. Plummer, May 24: Broadway Mine: The 75 ft. level has been advanced 3 ft.; total length, 767 ft. from old shaft. The vein is greatly disordered, and divided into small stringers. We have cross-cut north-east for 8 ft. (in addition to driving the 3 ft. above referred to) so as to find the main lode. The divided portion of the vein will doubtless unite again further ahead.—New shaft: We have done good work here during the past week. As reported in my last, we have just commenced driving a cross-cut from the bottom of the shaft; after driving 14 ft. we cut the vein, and have got into it

and north of No. 28 winze, are worth 1 and 6 tons of copper ore per fathom respectively. No. 42 winze, sinking below the 80, produces a little copper ore, but not sufficient to value. The ground in the 80, north-east of new shaft, is in favourable ground for driving, and produces occasional stones of copper ore. The 68 cross-cut, west of north level, yields 4 tons of copper ore per fathom, and one east of same level is worth 1 ton. No. 44 winze, sinking below the 68, has been communicated with the stop in the back of the 80, west of No. 24 winze, which has caused good ventilation, and laid open a valuable piece of stopping ground. The cross-cut in the back of the 48, north-west of No. 8 winze, is unproductive, consequently it has been suspended, and the men put to work in the back of the level. The stops in the 80 and upper levels show a little fluctuation at times, but on the whole they yield remarkably well.

**SPECTAKEL.**—Capt. Henwood, Capt. Lankbury, April 25: The 75 fm. cross-cut north-east from winze has not intersected anything of value. The ground in the 75 fm. cross-cut south-west from the winze has become harder and more sparely for driving. The ground in the 75 fm. cross-cut, No. 1 north-east from main level, has declined in value; now worth about 1 ton of copper ore per fm., but the appearance of the rock is still very promising. The 75 fm. level south-east from the winze is still unproductive. The stops, one in the back of the 64 fm. level and one in the bottom of the 53, yield about 3½ tons of copper ore per fathom each.

**TRIAL MINES.**—Capt. Henwood, Capt. Lankbury, April 20: The ground in the 40 fm. cross-cut north from the shaft presents nothing of value. This driving is being pushed forward as rapidly as possible towards the ore-bearing ground seen in the bottom of the 25 fm. level. The winze sinking in the bottom of the 25 fm. level is poor.—Port Nolloth: The vein seen at the surface has been intersected in the 12 fm. level west from shaft. Its composition is mica, decomposed felspar, and quartz. Driving has been started on its course in a southerly direction.

**RETURNS.**—For March, Ookiep, 1200 tons of 28 per cent.; Spectakel, 144 tons of 38 per cent. For April, Ookiep, 1200 tons of 28 per cent.; Spectakel, 144 tons of 38 per cent.—Bills of Lading Received: 455 tons per S. T., 430 tons per Aloua, 300 tons per Haven, and 450 tons per Hollybush.—Arrivals at Swanssea: The L'Esperance, Golconda, and S. T.—Arrivals at Port Nolloth: The Rosalie, Glendal, Broughton, Tanna, and Hondeklip.—Sales of Ore: 50 tons at 13s. 4d. per unit, 500 tons at 13s. 9d. per unit, and 1000 tons at 14s. per unit.

**CANADIAN COPPER AND SULPHUR.**—Francis Bennetts, June 5: At St. Francis Mine we are pressing the sinking of the shaft. At the Hartford Mine, shafts Nos. 1, 3, and 5, there is no important change to report, except that the 35 west from No. 1 shaft is looking more promising. The stops throughout the mine are looking well, and producing fair quantities of ores. The smelting works are running well. We made about 90 tons regulus in May.

**CHONTALES SILVER.**—May 5: During the past month we have driven 18 ft. in Consuelo deep adit level, and the ground is now a little better for progress. The total cost at the mines for the month of April was 235£, which included the sum of 100£ paid for registration fees, supply of charcoal, timber, and on surface for COACOVIL GOLD.—The directors, in forwarding Mr. C. J. Harvey's report of June 9, state that they consider it in every way satisfactory, and can only regret that notwithstanding all their efforts some delay has unavoidably occurred through the causes mentioned. Mr. Harvey reports:—I regret to say the season has been most unhealthy, and much sickness has prevailed among both miners and mechanics, which will doubtless disappear after the rains. This has necessarily caused delay, and the near approach of the monsoon rendered it important to employ all hands in securing cover for the machinery, and protection for the different open works and quartz at a bank. I must give your manager, Mr. Moon, great credit for the manner in which he has carried out all the important work entrusted to him. The reef has now been cut by the lower middle adit to a depth of about 150 ft. holding as strong as ever, and the main adit has been commenced, to strike it at about 70 ft. lower, which I hope will be done soon after the monsoon. This will be the level through which all the quartz will be taken to the stamp mill. I brought from Australia an experienced mechanic to assist with the machinery, and have ordered two improved percussion tables for concentrating the pyrites; finding them in most successful operation in the colonies, and possessing the advantage of being more easily and cheaply erected than buddies. These I hope will arrive on the mine in July. Everything possible has now been provided for, and if no unforeseen delay or accident occur, I think you may fairly expect the machinery to be in full operation before the end of the year.

**CORPORATION OF SOUTH AUSTRALIAN COPPER MINES.**—The following is the fortnightly report:—**VOCACOVANA MINE.**—Captain Gribble, April 7: The ore assayed 38¼ per cent. (worth at present prices 22s. per ton). I have commenced dressing ore at this and at Gannam Creek Mine. On the 4th instant I discovered another lode about 2 miles south-west of North Mount Rose. It is a very rich lode, 200 yards in length, varying in width from 9 in. to 4 ft., producing rich stones of grey ore throughout. I tried a sample, which assayed 49 per cent. (worth 29s. per ton). The engine and pumps for Mount Rose are on the road up.

**BLINMAN MINE.**—W. J. Paul: All the sulphurates at the smelting works, and also the sundries, have been smelted, and I have dispatched 282 bags of carbonate roughs, weighing 12 tons 17 cwt. We are laying down a tramroad in the 50 south. The lode at the 35 south of the plat is very hard and tight, and is not producing much ore. We tried to blast a hole to the next level, but failed. I hope to hole next week. The level driving south of the 35 is turning out a few good stones of ore mixed with low quality crusher work. In the winze in the bottom of the 25 south the ground is easier, and is producing a little more ore. We have been drawing from the south shaft nearly all the week, consequently have not sunk much; the lode is now chiefly low quality crusher work. We have still a great deal of stuff to draw from here. The carpenters are engaged putting on the roof of the engine-house, but I regret to say that the masons have been delayed a good deal during the last 10 days owing to the difficulty of obtaining good lime.

**WHEEL FRIENDSHIP.**—Capt. W. J. Paul, April 15: The men in the engine-shaft continue to make rapid progress, the ground being easy; they are earning good wages. I expect they will pretty well finish their 10 fms. bargain next week. I have had four loads of pumps carted down by our own drays, the same drays having loaded back ore, it being easier to dress it at Blinman than at Wheel Friendship. The stops have turned out a little nice ore—several tons. Mr. W. H. James (purser and accountant) has now been here a week, and I am much pleased with him. He having had some years practical experience as a miner he understands his work, and is both able and willing to render me considerable assistance outside the office, and take the stores, weighbridge, &c., completely off my hands.

**BLINMAN MINE.**—Capt. W. J. Paul reports on April 23: I am very pleased to be able to report that over 3 in. of rain has fallen during the last ten days, and that the slopes of the hills are already tinged with green. The floods delayed our surface work a good deal, swamped some of our workshops, flooded and spoiled a kiln of lime that the contractor had burnt ready for bringing in. The heavy parts of the engine are in their places in the engine-house, and have now employed underground 22 men. As follows:—Taking down side of the lode at the 50 south, by two men; the lode is yellow sulphurates, good crusher work; two men putting in tramway at the same level, two men clearing the 35 north; two men clearing up flat winze in the bottom of the same level, two men driving some fairly ore stuff. Two men driving south of shaft at same level at 104 a fathom; the lode has improved, and there is a good "vugh" of ore in the present forefront, worth from 15 cwt. to 1 ton of ore per fathom. The end is now some 4 fms. short of hoisting to Harvey's level in the bottom of the 50 south. The lode is again hard, and not producing much ore. It is about 11 fms. below the 25 fm. level. Two men driving on a cross-branch at the 25 south, at 104 a fathom. There is a branch of ore here about 1 in. wide, which I am driving on in order to see whether it will open out. Two men driving the 25 north on counter lode, at 144 a fathom. The ground at present is hard and poor. Two men sinking south shafts and clearing up stuff around the same. The lode is producing medium crusher work, with some good stones of ore. This shaft is now about 7 fms. below the 15. Two men driving the 15 south of south shaft, at 144 per fathom. The ground is hard, and does not produce any ore at present.

**WHEEL FRIENDSHIP MINE.**—The engine-shaft is down about 11 fms. The men have taken 7 fms. of cut water at 30 a fathom. I regret to have to report that the lode in the 15 south appears to be cutting out. The lode in the rise in the 15 south is up 6 ft., and is worth about ¼ a ton of ore to the fathom.

**GABRETT'S MINE.**—The new east shaft is down 12 fms. 2 ft. The lode is 2½ ft. wide, chiefly composed of quartz and gossier or soft brown and yellow iron ore. There is also a seam of yellow clay. The lode is rather flat, and water is close at hand. I reset this shaft to three men at 50 a fathom, and draw their own stuff.

**LEIGH'S CREEK MINE.**—Capt. Tregoweth reports:—I visited Leigh's Creek Mine this week, and I am well pleased with its prospects. There are three distinct lodes running nearly east and west. As seen on the surface they spread rather apart like a fan, going east, but approach and come together, and make one lode going west. Besides these three lodes showing so plainly on the west side of the creek there are three or four other places on the east side, where ore is seen cropping up out of the ground. We have sent down to Belmont 41 bags of ore of good percentage, and shall send down another lode of 20 bags this week. As it would require a large number of men to develop the three lodes at once, I would advise at present only opening up the most important one first. Although the lodes at the surface are really good, and all that one could desire to see, still I would advise proving one in depth to start with. My opinion, however, is, and I will at once say that if Leigh's Creek does not make a really good mine in depth I have not seen anything in the north that is likely to. My reasons are that the lodes are well defined, and so far as developed take a regular course into solid ground, carrying rich ore throughout, green and grey ore, copper pyrites, iron pyrites, and also every other promising feature of good copper lodes.

**MOUNT ROSE MINE.**—Captain Gribble reports on April 30: At the Mount Rose Mine I have three men cutting down engine-shaft contract, 300 ft. At the Vocacovana Mine I have two men driving cross-cut, last length 65 ft.; contract 160 ft. This will give an average back for stopping of about 70 ft. north of cross-cut. At the Gannam Creek Mine I prefer costing a little more, as surface has been intersected before I commence sinking an engine shaft 1 ft. by 6 ft. After the arrival of more miners I will put more on the present contracts, and also commence North Mount Rose and the other new discovery, the ore from which assayed 45 per cent.

**DON PEDRO.**—Mine Captain's monthly report for April: Bryant's Level: We are utilising this level to tram the debris through from explorations.—Explorations: The top branch or lode the few days we were able to work on it was very large and of good quality, but so much overburden has fallen that we have been able to obtain very little ore from it. As soon as one large amount of debris has been cleared another has fallen, so that although an almost incredible amount of work has been done the produce has been very low. The lode when last seen measured about 15 ft. high, and appeared to be very wide. On the 27th the lode was again cleared of debris, but during the night a large body of debris or ground came down, slipped off at a smooth head, which so choked the lode that with all our force it would take at least a fortnight to clear. Immediately the force was removed to north-east side of gully to clear surface soil, and fortunately some branches met with sampling moderately as a whole and even some rich ones obtained in bunches of clay, &c. The north level is started to cross-cut the lode to be able to mine it instead of open cutting, and to avoid the overburden, which is a great drawback; level has been extended 4 fms.—Shoot Pass from Bryant's to Adit Level: From Bryant's to Alice's level newly opened and from Adit to Alice's 8 fms. cleared; the timber in same very bad and rotten in places, and will have to be renewed, and, judging by appearances, a break has occurred in the clay course. We shall try to clear from Alice's down

## FORM OF APPLICATION FOR SHARES.

To the Directors of the Wassau (Gold Coast) Mining Company (Limited).  
Gentlemen,—Having paid to your bankers the sum of £ , being a deposit of 2s. 6d. per share on shares in the above company, I hereby request that you will allot me that number, and I agree to accept such shares or any less number you may allot to me, and I agree to pay the sum of 7s. 6d. per share on allotment, and I authorise you to insert my name on the register of members for the number of shares allotted to me.

Usual Signature.....  
Name in full.....  
Residence.....  
Profession.....  
Date.....1882.

5 ft., and no sign of the other wall. The ore is firm, lively, and bright. We have not made any average assays as yet. We have not seen the vein for an inclined depth of 60 ft., and it is very encouraging to find it so strong and large at this point; and as it looks equally as well at the 75, below the bottom of the level, there is not the smallest doubt but that we have a long and prolific piece of ground before us. Stop No. 1, west of new shaft, about 75, looks much as usual in size, but shows a quantity of white quartz mottled through it; this white quartz assays 25s per ton. Stop No. 2, east of new shaft, which I before informed you is of a chamber-like form, is getting nearly exhausted, and we shall be obliged soon to commence a new one. Stop No. 3, above 25 ft. level, close to new shaft (east side), has behaved strangely during the past fortnight. The vein pinched down to a mere thread, then opened out again quite suddenly, and recently we have cut a branch running north and very flat, which promises to give us a large quantity of ore. Stops from air shaft are producing some good ore, but the vein is very narrow. This is all our underground work at present. Our surface work is all finished, roads made, and everything in good working order.

—Cablegram received June 14: Clean-up 300 oz., 900 tons. New shaft assay of ore, 21s.

**BUENA VENTURA.**—June 7: In the 20, driving east of Henry's engine-shaft, a great length of lode was opened up in the past month, but of inferior quality. The 50, driving west of Cox's engine-shaft, is suspended for the present. The lode in the 20, driving east of Taylor's engine-shaft, is changeable, sometimes yielding good stones of ore, but it is not productive at present. The 30, driving in the same direction, has changed unfavourably during the past few days. At Taylor's engine-shaft, sinking below the 30, the granite is very hard, and the sinking was also retarded by the fixing of the plunger, which is now complete, and the work will forthwith proceed with greater dispatch; the lode is small at present. Henry's engine-shaft, sinking below the 22, is completed to the necessary depth for a 35 fm. level, and the men put to cross-cut south towards the lode. The usual rate of raisings was kept up during the past month, and we are now returning from all sources about 80 tons per month. The various works at the mine are going on very regularly, and the machinery is in good condition.

**CAPE COPPER.**—Capt. Henwood and Capt. Lankbury, April 30: Ookiep: The 92 cross-cut south-east of east level, north of No. 34 winze, is worth 2 tons of copper ore per fathom. The ground in the 92, north of No. 36 winze, having become uncongenial for copper, has been suspended, and the men put to drive west about 12 fms. back from the present end in ground worth 3 tons of copper ore per fathom. The stops in the back of the 92, south of No. 36 winze,

**TANKERVILLE CONSOLS.**—The report this week is of a very cheering nature. No. 1 north lode at Tankerville is worth 1 to 1½ tons lead. At Potter's pit the lode in the bottom is getting wider and improving for lead, and as the ore is getting more solid an important discovery is expected. At Bog the mine is in for the 148, at which level good tribute ground is to be seen, and rich ore stuff has already been drawn from the 143. There is a little improvement in the tribute pitches throughout the mine. Good progress is being made with the erection of boring and dressing machinery. The sampling this week is 195 tons lead ore, and next week the usual sampling of blends will be made. Altogether the report gives every reason to expect an early realisation of the success anticipated on the foundation of the company.

## Mining Correspondence.

## BRITISH MINES.

**ANDERTON.**—W. J. Bowhay, June 15: The late reports I have sent you might be all repeated in every respect. The size of the lode is not altered, and the quantity of tin in it is as large as ever it was. Our water has been heavier and we have been making good use of it. The stamps have been going night and day and have been beating out a fine lot of tin. We are burning and dressing our next parcel of tin, which will be 5 or 6 tons.

**BEDFORD UNITED.**—H. Trezise, June 14: North Lode: The 115 east drive is continued by the side of the lode; no change to report. The 103 west is also continued by the side of the lode without change. Several of the tributary pitches on this part of the mine were re-cut on Saturday last at former tributes. The burrows continue to yield a fair quantity of munda, seeing there is a good demand for it. I have thought it advisable to increase the number of hands on the burrows. M'Callan's Engine-shaft Bridge Lode: The shaftmen are making fair progress, having put in bearers and cistern and fixed lift from 42 to the 30. I hope in the course of another week to have the skip-road completed to the 42, and as soon as possible commence to drive east and west. The lode in the 30 west is giving out more water, and is about 2 ft. wide, composed of peach, munda, and grey ore. The lode in the 30 east is not quite so good for copper, notwithstanding it is a very fine lode 5 ft. wide and worth 30s. per fathom. The lode in the 20 east is about 2 ft. wide, composed of munda, grey and yellow copper. The winze sinking below this level is down 6½ fathoms, lode in the same is 3 ft. wide, and producing saving work. The winze west of shaft is sunk 5½ fathoms below the level; lode 2½ ft. wide, composed of gossan, munda, and a little grey copper.

**BLUE HILLS.**—S. Bennetts, R. Harris, June 10: There is no change to notice in the rise above the 80 east, nor in the Blue Burrow shaft below the 42. The 42 east end is worth 6s. per fathom, the 30 east end 8s. per fathom, and the Gumpas adit level, west end on Balduh lode, 15s. per fathom.

**BWLCH UNITED.**—Wm. Northey, June 14: In the 12 west, under adit, the lode has improved in appearance and character, now being 2½ ft. in width, and worth from 10 to 12 cwt. of silver-lead per fathom. In the 12 east, under adit, the lode is about 1 ft. 6 in. in width, composed of a light-blue kilaas, quartz, and blende ore, and letting out water freely. Such quantities are seldom met with in this mine. The stope in the back of the 30 look well, and will yield their usual quantities of silver-lead ore. In the stope in the back of the 50 the lode has greatly improved; worth in places from 1 ton to 1 ton 5 cwt. per fathom, but its average produce is about 17 cwt. In the 100 west the lode is from 1½ to 2 ft. wide, composed of kilaas, quartz, and blende ore, and a little lead ore. Marvin's Lode: The stope in the back of the 15 and bottom of the adit will yield their usual quantities of lead ore. Drawing, pumping, and dressing machinery throughout the mine is in good order. Samples of 20 tons of silver-lead ore were sent out on Saturday, the 10th inst. I shall forward a full report next week.

**CANNARVON COPPER.**—W. Darby, J. Roberts, June 13: Monthly Report: In the sump below the 90 we have sunk and stoped 3 fms. 1 ft. 5 in., and although the copper is still pinched up we are of opinion that it will shortly open and give a good yield. The ground is looking very kindly, and the ore has considerably improved along the bottom during the past week. In the rise at the back of the 90 we have cut into the lode 4 ft. 9 in., which is of a kindly appearance, and containing patches of rich ore. We are still cutting into the lode, which seems to improve daily; set to two men, at 11s. 10s. per fathom. In the stope below the 80 east we have taken down 4 fms. 2 ft. of the lode, which has become poorer this last fortnight, and worth at present about 1 ton of ore per fathom. The cross-cut at the 70 (Garnon's) has been driven 1 fm., and the ground is of a kindly appearance, and the copper, which is mostly on the hanging side of the lode, continues to improve; set to two men, at 12s. per fathom. The cross-cut at the 40 (Ore-groove) has been driven 5 ft. in ore ground of a very promising character, and we daily expect to cut into something good here; set to two men, at 12s. per fathom.

**CANNARVONSHIRE GREAT CONSOLS.**—W. H. Borlase, June 15: Since my last report extra progress has been made in the cross cut towards the lode, and during the last 3 ft. we have intersected a cross-branch, apparently a flint from the course-course, letting out a great quantity of water, and necessitating the engine going 6 strokes per minute in the shaft (of course, this will only be so on a dry day). The lode and country between the 14 and 24. I think we shall soon see the cross-course after which it will not take us long to reach the lode. The end on the footwall part of the lode, west of the cross-course at the 14, has produced good lead, and as the cross-cut at the 24 has cut the water I think we can now sink a winze in this level, which the men are now preparing to do, and I hope to report a good lode here shortly. The lode in the 14 east of Endeavour engine-shaft is producing 20 cwt. of lead per fathom, very promising lode. The lode in No. 2 stope is not looking so well, but I think will resume its former value in a day or two. No. 1 winze sinking below the adit is at present poor, owing to the footwall taking more down right, and the lead branch crossing the winze; to the hanging side, when the whole of the lode was last taken down it was worth 35 cwt. of lead per fathom. No. 2 winze is in a splendid lode, worth for length of winze fully 3 tons of ore per fathom. The stope in the back of this level is producing 12 cwt. of lead per fathom, and the rise 2 tons for 9 ft. long. In the diagonal shaft east and west lode the men have not taken down the lead bearing part of the lode since last report, but no doubt will start it to-night, and I am anticipating an improvement; last valuation 2 tons per fathom for length of shaft—10 ft. The 14 west of diagonal shaft is producing 30 cwt. of ore per fathom for the part being carried. The 8 west is not looking so well, but as the lode at the level opens and closes somewhat suddenly I think it will soon look better again; lode worth 15 cwt. of lead per fathom. The stope in the back of the adit west of diagonal shaft is producing 30 cwt. of lead per fathom, and the stope west of footwall shaft 2 tons of ore per fathom. I am pushing on the dressing of another parcel of ore as fast as possible.

**CARN CAMBORNE.**—W. O. Vivian, June 15: You will be pleased to know that the prospects of the mine are improving, more especially in the 105 fm., or bottom level. In the eastern end the lode is gradually increasing in size, and producing copper ore of good quality. The indications in the 70 and 40 fm. levels were also better than they have been.

**CLOGAU.**—W. A. Ramsay, June 15: The lode looks well in the rising, and though no gold has yet been found I do not like to leave the place yet. The quartz belonging to the gold-bearing band was narrow, and at first appeared as if it was going to be pinched out, but now it is opening out. It contains a little lead, some cobalt ore, and on the footwall there are pyrites similar to that occurring with the gold. The east driving is not so good; the ground is very tight and difficult to break. There are two bands of quartz here, neither of them being at all large. The hanging side is getting very white and poor-looking, and is turning in towards the footwall band. The heading here has been driven only 5 ft. 6 in. high by 5 ft. 4 in. broad, the size of the gallery required for the Penrice boring machine. It will take at least a fortnight to carry this heading sufficiently far in to allow of Captain Penrice fitting up his machine. I have cruised and retorted the gold we had in hand, about 99 lbs. of ore, which produced 41 ozs. of amalgam and 16½ ozs. of gold, for which we ought to get not less than 260s. This is rather better than I expected.

**CWM DRYOR (Bryannan Mine).**—J. Davies, June 14: Joseph's Level: No material change in the appearance of the lode since last report. Penrice's Level: The wheel and pump continue to work well; the water below the level is low. Bryannan: We have drawn the water out of the winze on the east side of boundary level, and found in the drift (southwards) from the bottom of it a run of lead ore 3 in. wide, extending all along the floor of the drift; water too quick in the winze, without pumps to follow this run of ore downwards.

**CWMISTWYTH.**—Joseph B. Rouse, June 14: The 8 fm. level has not yet been communicated to the long winze, but we hope to get a hole through early. The ground has for the last fortnight been more tight, which has somewhat impeded our progress. The end is all in lead, producing saving work for dressing. In Gill's lower level, driving west of No. 2 winze, the lode is 4 ft. wide, composed principally of a very hard quartz; the south part of the lode, containing more clay-slate, produces both lead and blende—of the latter about 1 ton per fathom. The 8 stope on the new lode, over and under Mitchell's level, and over the 15, are yielding on an average 8 cwt. of lead and 1½ ton of blende per fathom. The lode in the stope is hard; it is a noted fact that when lead gives place to blende, which is now the case in these stopes, as their yield of lead is less and blende more than formerly, the lode becomes harder. The 4 stope at Kingside, on the Kingside and copper lodes, are yielding as for some time past, with the exception of the stope under the 15, which has rather fallen off in yield during the past fortnight, the most productive part being disordered by a flat joint. The new stope in the Big Rock, referred to in my last report, is worth 10 cwt. of lead ore per fathom. The picking of old burrows is regularly proceeded with, and are producing lead and blende in paying quantities. Since the change in the weather we have been applying all possible force to the dressing of ore, and our machinery is now in full work and in good condition. Samples of 40 tons of blende were sent out yesterday, for sale on the 27th.

**D'ERESBY MOUNTAIN.**—J. Roberts, W. Sandoe, June 14: The No. 6 end keeps without any change, still spots of lead and blende in a good matrix of spar. The rise at the No. 5 directly behind the south end is looking much the same as last week, a good ore lode throughout, and worth from 2 to 3 tons to the fathom. In the north end in stripping down the lode we find that there is good lead ground, and has rather improved since we wrote last week.

**DEVON FRIENDSHIP.**—F. R. W. Dav, W. Gill, June 15: No change has taken place in the 30 end, east of Bennett's shaft; the lode is still very much disordered, and we are continuing the cross-cut in our former reports (to prove if a part of the lode is standing to the north of us). The men are not making so good progress in the rise in the back of this level, ground having become harder. We have been rising by the side of the lode, which we are now taking down, and shall let you know its value in our next. In the back of the 30, west of Bennett's shaft, we have started a new stope east of John Bright's rise; the lode is 4 ft. wide, and producing 4 tons of arsenical munda and 1 ton of copper ore per fathom. In the 12 west of Bennett's shaft, the lode is 5 ft. wide, and producing 6 tons of arsenical munda per fathom. In the adit east of Bennett's shaft, the lode is 4 ft. wide, and producing 6 tons of arsenical munda per fathom. The stope in the back of this level are yielding their usual quantities of munda. We have taken the men from the winze to assist the masons in raising stone for the new calciner. All surface operations are progressing satisfactorily. On sale of arsenical last month was 70 tons.

**DEVON GREAT CONSOLS.**—I. Richards, June 15: At Willeford's shaft the work in connection with cutting of pit, &c., at the 120 has been hindered for a couple of days in consequence of a difficulty occurring in the regular working of the lift. It is now, however, put right again, and the work is progressing very satisfactorily. In the 60, west of Watson's shaft on the Capel Tor lode, the lode is 2½ ft. wide, and composed of capel, quartz, peach, munda, and some copper ore of good quality. In the 60, west of Watson's shaft on the middle lode, the lode is 2 ft. wide, composed of capel, quartz, peach, and a small quantity of munda ore. In the 50, west of Watson's shaft, the lode is 1½ ft. wide, composed principally of capel, with some copper and munda ore interspersed.

**DEVON GREAT CONSOLS.**—I. Richards, June 15: Monthly Report: Wheel Josiah: During the past month the 144, east of the Count House shaft, has been driven 1 fm. 1 ft. 3 in., the lode proving 5 ft. wide, and of a promising character, being composed of capel, quartz, peach, munda, and some good quality copper ore.—Wheal Emma, Inclined Shaft: The 137 east, east of Friend's cross-cut, has been driven 4 fms. 4 ft., the lode proving from 3 to 4 ft. wide, and com-

posed of capel, quartz, peach, and small quantities of copper and munda ore. It is now improved, yielding good stones of copper and munda ore, and its general character is of a promising nature.—New Shaft, New South Lode: The 115 east has been driven 2 fms. 2 ft., the lode proving from 3½ to 4 ft. wide, composed of capel, quartz, peach, fluor, munda, and copper ore of good quality.—Railway Shaft: The 205 west, on the south part of the lode, has been driven 2 fms. 3 ft. 8 in.; the lode proving from 3 ft. to 4 ft. wide, and composed of capel, quartz, peach, and some copper and munda ore of good quality. The 190 fm. level west, on the south part of the lode, has been driven 3 fms. 0 ft. 2 in.; the lode proving 3 ft. wide, composed of capel, quartz, peach, and small quantities of copper and munda ore. This drive is now suspended to admit of a winze being sunk in the bottom of this level east of the new shaft, the lode in which is 4 ft. wide, and worth 2 fms. of copper ore and 4 tons of munda per fm. The 175 west, on the south part of the lode, has been driven 3 fms. 2 in., the lode proving from 2½ to 3 ft. wide, composed of capel, quartz, peach, and small quantities of copper and munda ore. This point of operation is for the time suspended. The 160 west, on the south part of the lode, has been driven 4 fm. 1 ft. 8 in., the lode proving from 2½ to 4 ft. wide, composed of capel, quartz, peach, munda, and some good quality copper ore.—Watson's Shaft: The engine-shaft has been sunk 1 fm. 1 ft., making the total depth below the 85 fms. level 5 fms. 4 ft., the ground proving of a very congenial character for the production of mineral. The 88 fm. level, east of the engine-shaft, has been driven 1 fm. 4 ft., the lode proving 1½ ft. wide, and composed of capel, quartz, peach, and small quantities of copper and munda ore. At the western shaft the fixing of larger pitwork has been completed, and the men are now engaged cutting a plat at the 20, which will occupy about three weeks, after which sinking will again be resumed, and the 20 will be driven east on the course of the lode; and, judging from its very promising appearance, an early improvement may fairly be expected.

**EAST BLUE HILLS.**—S. Bennetts, June 14: The lode in the adit east end is much the same as last reported, and worth from 6s. to 7s. per fathom. In the rise above this level the lode is being deuced, and consequently there is no change to notice. In the 40 east end the lode is 4 ft. wide, and worth 8s. to 10s. per fathom. During the past four weeks the water available for stamping power has only been barely equal on the average to the requirements for six heads, yet we got through 2½ tons of tin for sale on Saturday last. This speaks well for the future, and is highly encouraging for more extended operations. **EAST CHIVERTON.**—J. S. Southey, June 15: At the 100, driving east of engine-shaft, the lode is strong, 4½ ft. wide, from which some splendid stones of rich silver-lead ore have been broken already. I am well pleased with its appearance, which promises to improve as the end is extended; driving by four men, at 3s. 15s. per fathom. Meeting with ore in this direction, in addition to west of shaft, cannot fail to add considerably to the value of the property. In the 100 end, west of shaft, the lode is split; this I consider only temporary, as the same thing occurred in the level over just before we entered the course of rich ore in that level. The bargain for driving 20 fms. certain at this level the men have nearly completed, the ground is hardening. Surface operations progress satisfactorily, and the engineers are removing the steam-whim to the mine.

**EAST DAREN.**—Thomas Garland, June 14: In the 92 end west not anything has been done since last reported, on the men being employed in securing ground and putting Taylor's shaft in repair. In the 80 east the branch of ore opened upon fluctuates in yield; present value 15 cwt. per fathom. The 80 end west shows a little ore in the forefront, but to further test it a better part of the lode is standing in the north side, the men have commenced stripping down the lode; where cut into a few feet above (under the flat) it yields 1 ton of ore per fathom. In the 65, west of Vaughan's winze, the lode is small, yielding stones of copper ore of good quality. The stope throughout (four in number) yield fair quantities of ore. The machinery is in good working order, and the dressing of halvan stuff now being pushed forward, and hope to have a parcel of ore ready for sampling on Tuesday the 27th inst.

**EAST LONG RAKE.**—H. B. Vercoe, June 15: In the 50 west I have commenced another rise about 15 fms. in advance of the stope, and I am pleased to say that the lode is improving, and likely to open out another good piece of stopeing ground. There is a rib of ore forming on the footwall, about 3 in. pretty solid. Shows the lode continues to improve, it will be very important, as it will be the continuation of the lead in the lode on the top of the Great Flat. The lode in stope in roof of the 50 west is producing 1 ton of lead per fathom, and the ground moderately easy for working. In the 50 east there is no change since my last report; we meet with small strings of ore occasionally, but not enough to value. The Shallow Flat looks quite as well as it has done for some time past, and now that we have had some heavy showers sufficient water has accumulated in the reservoir to enable the tributes to commence dressing, and all being well, their ore will be included in the next sale. Our parcel of ore sold to Messrs. Walker, Parkes, and Co., at 9s. 6d. per ton, and is ready for delivery at any other part of the mine.

**EAST ROMAN GRAVELS.**—Arthur Waters, June 15: The work in connection with the new pump at the 103 is being pushed on as fast as possible, and we hope to have it in good working order by Saturday next, when the driving of the said level will be resumed. The 97 south shows a good-looking wide carbonate of lime lode, yielding 15 cwt. of lead ore per fathom, and improving. The stope in the back of this level, about 40 fms. from shaft, is improving as we rise, being now worth quite 20 cwt. of lead ore per fathom. The new winze in the 50 south, about 30 fms. from shaft, is 4 ft. wide, worth 1½ ton of lead ore per fathom. The stope in the bottom of the 85 south is worth 3 tons per fm. The tribute pit in the 75 south is worth 12 cwt. per fathom. The usual sampling will take place next week.

**EAST WHEEL LOVELL.**—R. Quentrell and Son, June 11: Setting Report: Engine Lode: There are eight men driving the 68, east and west of engine-shaft, at 16s. per fathom, and the lode is worth about 15s. per fathom. The 10 to drive west of the old engine-shaft, by four men, at 6s. 10s. per fathom; lode worth 6s. The stope in the back of this level, by four men, at 4s. per fathom; lode worth 5s. to 6s.—Rogers' Lode: The shaftmen are sinking the middle shaft below the 54, by the side of the lode, but have not yet completed the contract set them last month. There are six men sinking the winze below the 42, east of shaft, and six men rising towards it from the 54; this will be held in a few days, and we shall then drive east as fast as possible, when we think an improvement may be expected.

**FRONGOCH.**—J. Kitto and Son, June 10: We are pleased to be able to state the section of ore ground at the 55, east of Vaughan's shaft, proves quite equal to our most sanguine expectations, it is fully 10 fms. long, and on an average yields 20 cwt. of lead and 30 cwt. of blende ore per fathom. We are now engaged in working it upwards towards the 44, and as soon as our present operations will admit, we shall commence sinking a winze in the bottom of this level (the 55), which will undoubtedly open a valuable piece of ground in depth. At the 24, just directly over the place referred to above, we have commenced sinking a new winze on the north part of the lode, which looks very well, and yields 25 cwt. of lead ore per fathom; and about 20 fms. east of this point we have a set of men opening another piece of productive ground, which, as far as yet proved, is worth 1 ton of lead and 4 tons of blende ore per fathom, and the lode is of great extent in this part of the mine, there is every probability of its yielding considerable quantities of ore, which, with a fair price for the same, would pay the working expenses and leave a fair profit. The other points of operation to which we have referred in previous reports are going on as usual, and present no change worthy of remark. Our dressing machinery is in full and active work, and as the result of our operations, we shall sell during the present month 300 tons of blende, and meanwhile are preparing another parcel of lead ore also for the market.

**GEORGE ROWE (George Row, June 10):** The lode in the 117 east is still of the same cheering description, yielding 20 tons of arsenical munda and copper ore per fathom. The lode in the stope in the back of this level (the 117) is worth 13 tons of munda per fathom, intermixed with good quality copper ore. The lode in the 105 end is producing 5 tons of munda and ore per fathom. The lode in the stope in the back of this level (the 105) is producing 12 tons of arsenical munda and ore per fathom. The lode in the 70, east of cross-cut, is worth 12 tons of munda per fathom. The stope in the back of the 70 is yielding 14 tons of munda per fathom. We shall be leaving out our chambers early in the coming week, which is likely to be over 50 tons of soot.

**GLASDRI ARGENT.**—J. Parry, June 14: In consequence of the rollers breaking of course I have been obliged to stop the mill, and the mine is rather full of raised ore. Most of the miners and labourers have been stopped until the mill, &c., are set right. Invoice came to-day from Sandicroft, and I suppose the castings will be at Dolgelly to-morrow or next day, and will be forwarded to the mine at once. I have made a thorough inspection of the mine, and find it in good order. There will be no delay when the castings arrive. The copper ore is better in the roof than it was. Total ore sold 251 tons, for 1200s. Ore at Swansea and in stock about 35 tons.

**GOGINAN.**—J. Kitto and Son: In accordance with the statements made in our previous reports, we have recently commenced opening on the north or main part of the lode, which, to a great extent, stands unexplored both at the 15 and 20 near the point of communication between these levels, and are glad to state, as far as tested, it looks as well as we anticipated, being large, of a very promising character, and yielding from 15 to 20 cwt. of silver-lead per fathom. Seeing this point is so shallow it is, in our opinion, very encouraging as, judging from its present appearance, there is every probability of opening out a considerable section of productive ground at this level; and as it is followed in depth we see no reason why it should not increase in extent and value, and form a course of ore somewhat similar to that found a little farther east, as there is an ample length of unexplored ground in this part to make a permanently productive mine. Moreover, this is a piece of ground which we shall be able to test and open up rapidly, situated as it is between Frances's shaft on the east and the western shaft, which latter is only about 20 fathoms west of the ore now being operated on at the 20. This western shaft is now down 12 fms. below the 27, and after sinking about 15 more fathoms, intend to drive east to prove the lode generally, and this shoot of ore in particular. This will be in the 40, or 20 under the point at which it is being wrought at present, meanwhile the 60 is being driven west of Frances's on a large and kindly lode towards this point, which as it extends will lay open another 20 fathoms in depth; thus these two points will quickly interest and place at our disposal a very promising piece of ground about 40 fms. high. To assist the carrying out of this work we shall push on the sinking of the western shaft towards the 60 immediately after starting the proposed 40. Frances's shaft is being sunk below the 60 in very congenial stratum for the production of silver-lead ore, and no time will be lost in getting it down and opening a deeper level on the lode in connection with the runs of productive ground which the former owners wrought to the 60, and which, judging from the undiminished size and favourable character of the lode at that depth, we hope to find below.

**GOODEVERE.**—R. Knott, June 14: In the drive west from shaft the lode at present is unproductive, but from the favourable description of the ground I have no doubt it will soon improve again. In the stope in the back of this level the lode is 2½ ft. wide, producing stamping work. In the drive east from shaft, and the stope in the back of this level, the lode at each point is 2 ft. wide, producing tin.—Lower Shaft: We are making every effort to complete the floor-boards and perker as quickly as possible, and find about a fortnight from this date to be in a position to connect, after which we expect to make good progress in sinking below the lead.

**GODDARD'S LEAD.**—C. H. Vivian, June 15: We continue to make good progress in sinking the eastern shaft; the last 12 ft. has been sunk in the finest lode that has ever been seen in the mine. The lode is now the full width of the shaft (4 ft.), composed of beautiful carbonate of lime, well charged with beautiful lead and blende ore; worth 15 cwt. to the fathom, and improving as we go down. The mine never looked so well as now.

**GREEN HURTH.**—J. Polglase, June 8: Good progress is being made in fixing the new engine. Swan shaft is worth 5 tons of ore per fathom. In the bottom end north the vein is not quite so wide, worth from 3 to 4 tons per fathom. The stope in the back of above level is worth 4 tons per fathom. The stope in the back of bottom level, south of Swan shaft, is worth 1½ ton of ore per fathom. No. 3 stope is rather disordered, worth 1 ton per fathom. No. 4 stope is worth 3 tons per fathom. In No. 5 stope there is nothing to notice. The vein is not cut through in the 31 near the end. In the course of another week we expect to see No. 4 vein. We are looking forward to a grand future in the sinking of Swan shaft. Dressing going on well.

**GROGWINION.**—John Kitto and Son, June 10: There is but little alteration either in the nature or the value of our underground operations since the date of our last report. The different sections of ore ground being wrought from the bottom or 24 fm. level upwards are yielding very satisfactory quantities of lead ore, and plainly show the very productive character of the lodes in this mine; and seeing the greater part of the property is yet untried, we have no doubt an energetic exploration of some of its most promising points will be quickly followed by such discoveries of ore as, with a fair price, will put the concern on a permanent and profitable basis. As the result of our operations during the past four weeks, we have to-day sampled 50 tons of lead ore for sale on the 20th inst., which will pay all our working expenses and leave a very good profit, but it must be fully understood that we are working on our reserves, and unless new ground for stoping is speedily opened out, our returns must necessarily fall off.

**GWYDYR AMALGAMATED.**—J. Roberts, Wm. Sandoe, June 14: Aberllyn: The rise in No. 2 is just exactly in the same position as it has been during the month; it is now up a little over 7 fathoms from the level, and there is a distance of about 7 fathoms more to get through to the shaft. There is not much doubt that this communication will open good blende ground, but the chances are that on cutting through the lode after we have made the communication we shall discover lead. We cannot be persuaded that such a lode as this is simply a blende lode. It must be remembered that this lode, although driven on in No. 2 for a great distance, has not been out through anywhere within a distance of more than 20 fathoms from the shaft, and it must be at least 4 fms. wide at this place. The stope in No. 2 has been yielding about 2½ tons of blende to the cubic fathom, or 5 tons per fathom for the whole width of the lode, but to-day it is looking better, and producing more solid blende. There are sometimes some very nice patches and strings of lead in the lode, but not sufficient to value. The dressing machinery is working exceedingly well.—Clementina: For the last fortnight we have not been able to do much in the bottom level, as we reported last week; scarcity of water for pumping stopped our water-wheel for some days, and then it took just as much time to get the water out which had accumulated. However, the bottom level is now dry again, and as soon as we can clear away the stuff which had accumulated for want of water to draw to surface the men will fall back into their places. The north end in the bottom level is about 1 fathom beyond the south end of the ore in the 34, and we cannot understand how we have not got the lead here, unless it is dipping north. There is in the 34, in the bottom of the level, just over this end, a nice leader of lead in the lode, worth about 15 cwt. to the fathom. The sump further north is still partly full of water, and the men are rising from the roof of the level just over it to get up to the 25, where we also expect shortly to cut this ore which is in the rise, worth about 15 cwt. to the fathom.

**HINGSTON DOWN.**—Thomas Platt, June 14: The engine-shaft is down below the 25 fms. 1 ft. cistern-plat out, and the fixing of the standing lift will be commenced to-morrow and be completed by the end of the week; the sinking will then go on more rapidly. The lode in the east is large and promising, producing in places good stones of copper ore. In the 12 there is no material change; the north branch alluded to in last report is still producing in places stones of ore, and the south part of the lode is composed principally of quartz, arsenical munda, and occasional stones of copper ore. The stope in the back of this level continues to produce ½ ton of ore per fathom, and the lode is of a very promising description. The lode in the deep adit level, east of the south shaft, is without change. In the adit cross-cut, south of the 20, the lode branches have been cut through, and the ground in the present end is not quite so easy for progress.

**KIRK MICHAEL.**—R. Rowe, June 14: There is no change in either of the cross-cuts at the 20, except in the north one, where a great deal more quartz has come in strongly mixed with lead.

**KIT HILL GREAT CONSOLS.**—Isaac Richards, June 15: At the tunnel level the ground continues favourable for progress. In the north engine-shaft, sinking below the 62 fm. level, the lode is 3 ft. wide, composed of a large portion of quartz, with capel, peach, and small quantities of munda and tin ore. In the 62 fm. level west, the lode has been cut into on the north side about 2½ ft., which consists of quartz, capel, prlan, and a little tin ore. In all probability a more productive portion of the lode is still standing to the north, and the drive is being continued in that direction for proof of same. In the 62 fm. level east the lode is 2 ft. wide, composed of capel, quartz, munda, and a little copper ore. In the rise in the back of the 62 fm. level west the lode is 4 ft. wide, composed of capel, quartz, peach, munda, and a little tin ore. In the 48 fm. level west, the lode is 5 ft. wide, composed of gossan, capel, quartz, peach, and a little tin ore. The stope in the back of this level is improving, and we hope to be ready with the rock-drill machinery at the tunnel level by the end of this week.

**LADY BERTHA.**—T. Gregory, June 14: The lode in the 40 fm. level, east of cross-course, is from 4 to 5 ft. wide, of a fine, strong, masterly appearance, and will produce 10 tons of munda and copper per fathom. The lode in the rise in back of this level will produce 8 tons of munda, and is improving for copper. Cox's stope below the 30 will produce 6 tons per fathom. The stope below 30 from Rowe's winze will produce 6 tons per fathom with an increase of copper to 20 cwt. per fathom. The stope in the back of above level is worth 1 ton of lead ore per fathom. We are forcing on the dressing, &c., of another cargo of minerals.

**LEAD ERA.**—J. A. Ede, June 14: We have made good progress during the week, but the only change in the ground is the appearance of a little more loose clay in the flat. I should say that for the present we have passed the water noticed in my former report.

**LEADHILLS.**—A. Waters, June 15: Brown Vein: Gripp's adit level going north of Gleyon engine-shaft shows a fine quartz lode with stones of ore, the country rock being of a very congenial character. Pitch in the 20 south of shaft by two men at 30s. per ton; worth quite 15 cwt. of lead ore per fathom.—Hopeful Vein: Pitch in roof of Gripp's level north of the above shaft by four men at 30s. per ton; worth 15 cwt. per fathom.—George's Roust Vein: Gripp's adit going north of Muir's cross-cut has not yet made any discovery, but we consider this pioneer level to be a good trial, there being a long piece of virgin ground to explore.—Brown Vein: The 100 south of Jeffrey's engine-shaft is driven 13 fm. 1 ft. 6 in.; lode at present being 4 ft. wide, hard quartz, but without ore to value. The 85 south is driven 5 fm. 5 ft. 4 in.; lode in present end worth 25 cwt. per fathom. The stope in the back of above level is worth 30 cwt. per ton. Watson's winze below the 70 going down at a point about 18 ft. in the adit above 85 end is sunk 6 fms. 5 ft. 3 in.; lode in bottom of it being worth about 7 tons per fathom. The 70 south of the winze—the end is now 92 fms. 4 ft. from Jeffrey's shaft—is at present in rather hard ground, and lode not to value. We doubt if this end has yet reached the ore ground seen in the 41, 30, and 20 at adjoining Wilson's shaft. The rise in said level against Hope's winze coming from 50 is worth 3 tons per fathom. The said winze below the 50 is down 3 fms. 4 ft. 9 in.; lode worth 6 tons per fathom. Wilson's shaft is 2 fms. 2 ft. 6 in. below the lode; worth 1 ton of lead ore per fathom. The stope in the adit level at a point 7 fms. north of shaft is down 5 fms. 1 ft. 6 in.; lode worth 5 tons per fm. We have suspended the sinking for the present, and put the men to drive south to prove the dip of the ore; lode in the drift 5 ft. wide, and worth 9 tons per fathom. The stope in back of 41, south of Brown's winze, is worth 3½ tons per fathom. The stope below 20, north of Wilson's shaft, is worth 3½ tons per fathom. The stope in same level, north of Cameron's winze, is worth 30 cwt. per fathom. The stope above the 10, south of Moffat's winze, is worth 2 tons per fathom. Gripp's adit on Brown's lode is driven south of Wilson's shaft 31 fms. 2 ft. 6 in.; lode in present end worth 1 ton of lead ore per fathom. We are at present making our way through old men's workings, the ground being stoped away in back and bottom. There is palpable proof that the old men had a productive lode here—a run of ore ground to the south of Dobie's lode, and therefore separate and distant from the runs of ore described in the foregoing as standing in the different levels to the north of the said junction. If the section to the south turns out as well as that on the north of Dobie's the great success of the company will be established for a long time in the middle. When we remember that Gripp's shaft, south of Jeffrey's shaft, was driven for the express purpose of developing the old mine south of the above-mentioned junction, and not in search of the rich runs now in hand to the north of it, these having turned up unexpectedly, it is only fair to predict that the long drive in said adit south into the Hill ground will not be a labour in vain.—Raik Vein: Pitch in Gripp's, north of Jeffrey's cross-cut, by two men at 90s. per ton; worth 15 cwt. per fathom. The 10 north of No. 1 winze, south of Watson's shaft, is without ore to value. The stope above 6, north of Sommerville's winze, is worth 35 cwt. per fathom. The 20, north of G. Raik's winze, is not to value. Jeffrey's Vein: The 10, west of Raik's vein, on the above lode, is worth 3½ tons per fathom. Pitch in back of Gripp's by two men at 80s. per ton; worth 20 cwt. per fathom. The new pumping and winding-engine at Wilson's shaft is screwed down on the loading; drums fixed, and all ought to be in working order by end of this week. The tramroad from Wilson's to Reid's dressing-rooms is in fair way to completion.

**LANDEGLA.**—H. Hotchkiss, June 14: In the 38 yard level, west of shaft, I do not see any change in the ends calling for any special remarks. The lode and country rock are much the same as last reported.—Flat Measures: I have fixed upon the spot for a new trial shaft to be put down in these measures, and the men are now preparing timber and getting it up to the place to be in readiness for use; this being done the sinking will be proceeded with at once, and shall be carried on with as much speed as I can bring to bear upon it. I calculate that we shall have to sink from 25 to 30 yards to get to the base of the grits or sandstones underneath which I expect to find the flat. The shaft will go down on the point of the middle lode.

**LOVELL.**—J. Frisk, June 15: At the Howan shaft the 56 west of sump is disordered by granite, and does not now produce paying tinstuff. Lode in the rise in back of the 40 over sump is 5 ft. wide, producing only low quality tinstuff at present, a very kindly looking lode. Lode in back of the 33 west of engine-shaft is 10 ft. wide, a fine looking lode but poor. In back of the 12 west of engine-shaft are four men blasting down an arch, where the lode is 10 ft. wide, and will produce 1 qr. of tin; this can be broken for about 5s. per ton.—New North Lode: The 20 east of engine-shaft has very much improved during the past month; at present the lode is split in two parts, with 18 in. of soft granite in the middle. I expect this will shortly disappear, when we may expect a nice compact lode; driving at 4s. per fathom, can be stoped for 30s. per fathom. The 20 end west lode is improved in appearance very much this month; at our last setting it was small and quite unproductive, it is now 2 ft. wide and the next pile drawn will pay to stamp. The trial shaft is so far drained as to enable us to resume the sinking, which is much needed for the ventilation of the 20 from engine-shaft. We have two men driving a cross-cut north at the 10 to prove a lode said to be

lode, is mixed with veins of spar and a good deal of sulphurous mudic, and is rather sparse for driving. The lode in the 20, west of shaft, on the south side, is 5 ft. wide, and yielding 3 tons of ore per fathom. The winze in the bottom of this level is yielding 1½ ton of ore per fathom, and looking kindly to improve. The lode in the 100, west of shaft, is 5 ft. wide, and yielding 1 ton of ore per fathom, but we think there is more lode standing in the south side. The winze in the bottom of this level, east of shaft, is yielding 1½ ton of ore per fathom. The lode in the 110, east of shaft, is 6 ft. wide, yielding 2 tons of ore per fathom, and likely to further improve. In the 110, west of shaft, the lode is 3 ft. wide, and yielding 2 tons of ore per fathom. The lode in the 120, east of shaft, is 5 ft. wide, and yielding 2 tons of ore per fathom. We have not taken down any lode in the 90, driving east from the old engine-shaft, since the last report. The lode in the 110, east of the old engine-shaft, is 2½ ft. wide, and yielding occasional stones of mundic and copper ore. We have not yet met with the lode in the 110 driving north-west of shaft, but from the indications expect to do so very soon. There is no change to notice in any other part of the mine. Our sampling on Tuesday next will be about 630 tons of copper ore.

**MONKSTON.**—J. Goldworthy, June 15: So far as the lode has been seen in the 30, for 10 ft. wide it is rich ore, as appeared on, and the water drained; the size, &c., will be tested. From present appearances there is a fine course of ore before the end. We are opening by the side, so as to have room to open the lode. The lode in the winze is widening; the sinking is slow on account of the turns in the lode. Every effort is being made to effect a communication.

**MONA CONSOLS.**—T. Mitchell, June 14: The lode in the trial shaft continues to present a similar appearance as when last reported, which is of a very promising nature. The things belonging to the pumping gear are being got about as fast as circumstances will admit. Some of the pumps are here, and the remainder to be sent daily.

**MOREA DU.**—R. Mitchell, June 14: The various points here continue to look much the same as when reported last week. The lode at the 60 is looking very well; the men have been engaged several days putting in stulls, filling up, and securing the ground. This place is now in good working order, and we hope to get out some good ore. The lode at the 43 has improved during the past month, and the bluestone we are now getting is of better quality. We have drilled the ground at the 35, and have directed the men to drive south in order to get under the ore ground recently cut near Ida shaft. We have about 14 fms. to drive to get under it, but we may cut into a good lode before reaching that point. The ground is moderately easy, and we hope to drive from 4 to 5 fms. a month. The lode in the driving from bottom of winze near Ida shaft will yield 4 tons of bluestone and 3 tons of copper ore per fathom, and we hope to cut this ore again at the 36 shortly.

**MOUNT CARBIS.**—W. Tregay, G. Johns, June 15: The sulph shaft is now down 10 fms. 4 ft. below the 35, and will have reached the 50 by end of this month. The Great Flat lode in 33 north is 21 ft. wide, and is worth 25¢ per cubic fathom. The south lode in 27 west is worth 12¢ per fathom.

**MYNED GORDON.**—Thos. Kemp, June 14: Within the last two or three days the part of the lode carried by the 40, end, west of cross-cut, has for the width (5 ft.) become exceedingly favourable for opening, the same being composed of killas and quartz, intermixed with a considerable amount of mundic and a little lead ore, but not enough of the latter to value. The level above (the 34) passed through a similar bar of poor ground before entering the main body of ore, so we may consider this falling off in the value of the lode only temporary. The part of the lode opened on by the 45 end, east of cross-cut, continues of the same kindly appearance as reported last week, composed of quartz and calc spar, carrying a little mundic, and at times showing spots of ore. I consider the lode here of a most favourable description for the production of mineral. All other bargains throughout the mine are without any change worthy of note since last advised. Hauling and dressing is being pushed with all speed, and the machinery is in good order.

**NEW TRUMPET CONSOLS.**—R. Quentrell and Son, June 15: Franchis Lode: The lode in the shaft, which is being sunk below the adit by nine men, is looking more favourable, and is improving in appearance as we sink. We shall shortly be deep enough for another level, when we think there is every prospect of our opening on some productive tin ground. —Wheal Vails Lode: The level shaft is sunk 16 fms. 4 ft. 6 in. below the adit, and we have just commenced driving east and west at the 16 fm. level (or 30 fms. from surface). It has latterly been producing tin stuff of good quality, and is very similar in character to the run of tin ground on the lode at the 143 fm. level, just under this shaft, and which was so productive in the late working. We think we shall quickly open up some good tin ground on this lode, especially as we have some good tin stuff in a winze which we have just commenced sinking, a few fathoms west of shaft, for ventilation, &c. The south lode, in the adit end, contains a little tin, and is looking very promising. It is not yet deep enough to open, but the prospects in driving this end, as it is going back into a run of ground in which all the parallel lodes that have been worked, both north and south, have been very rich and profitable.

**NEW WEST CARADON.**—N. Richards, June 14: The counter lode on which we are driving, west of Hallett's cross-course, in the 55, has an improved appearance, and I have reason to believe that we shall meet with ore at this level. It is extended west. We have been opening out west on a branch in this level, which will yield copper ore per fathom. The lode in the rise in the back of the 42 will yield 1 ton of ore per fathom. There is no change to notice in the 38 cross-cut, driving south of Hallett's shaft, or in the little north lode, on which we are driving west in this level since my last.

**NEW WHEEL PEEVOR.**—W. T. White, June 15: We are still driving the cross-cut north at the adit level for the purpose of cutting the main tin lode of Wheal and West Wheel PEEVOR. We feel confident it is in this direction, and we hope within a short distance.

**NORTH BUSH UNITED.**—J. James, June 10: The lode in the 13 east is improving in size and quality, 2 ft. wide. We have to-day tried some of the stuff, and valued the lode from 5¢ to 10¢ per fathom—a very promising lode.

**NORTH GREEN HURTH.**—Jas. Polglase, June 8: The cross-cut is precisely the same as for some time past. We have taken down the side of level referred to last week in the drive south-west. Prospects in that direction not improved. We are now driving north-east, the vein is more promising, and producing good stones of ore. We have about 3 fms. more to drive before rising through new prospect, so as to be sufficiently distant from injuring the road.

**NORTH GROSVINION.**—John Kito and Son, June 9: The 26, which is at present the deepest and most important part of the mine, is being driven east and west of the new shaft on the course of the lode by full sets of men, who are making very satisfactory progress in laying open the bottom of the mine, and we are pleased in being able to state the result of these operations hitherto is quite equal to the anticipations we have expressed in our previous reports. At this depth we find the lode as well as the accompanying rock to be of a more settled and favourable character than at any shallower point, and consequently the former is more uniformly valuable than has been in the upper levels; the ground opened up since my last report is of a most promising nature, being worth from 15 to 20 cwt. of lead ore per fathom, and we may add the character of the ore and the matrix are of the richest and most and most congenial kind—in fact, the lode in the bottom of this mine is at present precisely similar to the Grosvenor lode in the upper part of that mine, and should it maintain its present yield of ore, as there is every reason to expect it will do, we shall soon open out a good piece of profitable ground for stopping, the nature of the rock being most favourable for speedily and economical mining. We have divided and cased the new shaft with iron, and are now drawing the ore to surface, and are working cheaply and expeditiously. In driving the 24, west of the new shaft, we have passed through several nice little bunches of lead ore, but as far as seen, the lode is not sufficiently settled at this depth to be remuneratively productive. We have, therefore, suspended our operations at this point for the present, but possibly we may find it necessary to resume them hereafter to assist in taking away the ore ground below, and to convey ventilation to the bottom of the mine, as the development proceeds. At the 12, east of the new shaft, we have driven through a piece of productive ground, from 10 to 12 fms. long, and 4 ft. wide, and from 12 to 20 cwt. of lead ore per fathom, and have just commenced sinking a winze below this level in order to prove it in depth, and to open it for stopping. With the same object in view the 24 is being driven east towards this point, and in about two months from this date we hope to reach the ore ground at this level, and thus by the co-operation of our efforts at these points we may reasonably expect ere long to open a good section of profitable ore ground in this part of the mine also. From the foregoing, we hope it will be clearly seen that there is at present every prospect of the mine being brought into a profitable state, and that at no very distant period. At surface the erection of the new plant and the necessary arrangements in connection with the same are already complete. The pumping and winding machinery will be started some time next week, and we hope to get the ore crusher with a part of the dressing machinery in working order soon after, when we shall commence dressing the lead ore stuff, of which we have a considerable quantity drawn to surface, and shall shortly have a parcel of lead ore ready for the market.

**NORTH HEADSPOOT.**—Thos. Telesse, June 15: The lode in the 117 end is larger than when last reported; now over 2 ft. wide, and yielding 4 cwt. of lead ore per fathom. The No. 1 stope, in the back of this level, continues to yield 8 cwt. of ore per fathom. I have put two of the end men to stop the ground at the north end of the stull, where the lode is worth 7 cwt. of ore per fm. The water still continues to come out of the 80 cross-cut, and the ground is a little easier during the last week. The pitch at this level still yields about 8 cwt. of ore per fathom. We purpose sampling two parcels of ore on Saturday, together about 20 tons.

**NORTH PENSTRUTHAL.**—S. Davey, W. Polkinghorne, June 7: We have no change worthy of remark in either of the bargains except the 120 driving west, from which we broke some good yellow and black copper ore.

—S. Davey, June 13: The lode in the 120 driving west is again changed in colour, still looking promising, and producing a little copper. The lode in the 108 is large, and producing occasional stones of tin.

**OKEL TOR.**—H. Bulford, J. Rodda: There is nothing fresh to record since last week's report.

**PANDORA.**—H. Nottingham, June 15: The various points working underground are looking well and maintain last week's valuations. We have bored through from the No. 3 winze on Goddard's lode to the rise below, and shall in a few days be ready to start a fresh stop in end of this winze.—Surface: On Monday night the crank-pin of the big wheel got loose and came out, but fortunately did no damage to the rods or pitwork. We got the engine ready, and put it to work on Tuesday afternoon. Yesterday we had to change one of the crusher rolls again; after working well for a few days it broke. We are crushing again to-day, and are now busily engaged fitting up another crank-pin, and hope to have it finished by Saturday afternoon, so that we can put on the wheel to pump again. We have now a fresh supply of water.

**PARYS COPPER CORPORATION.**—T. Mitchell, June 14: The ground in the 90 west, on No. 2, has undergone a change lately, and we find some small strings of copper and sulphur coming in. We have been looking forward for an improvement here for some time from the kindly appearance of the ground. The No. 2 east at this level has improved in appearance since we have started to drive in this direction. We have a little more water coming from the fore-bore, which is a favourable indication. The lode in the rise in back of the 90 continues to yield from 3 to 3½ tons of copper ore per fathom. The pitches are, on the whole, looking much the same as for some time past. The bolter-makers will finish repairing the large boiler early next week, when we shall at once fix it in its place, and prepare for crushing the ore.

**PATERSYKE AND CLARGILL HEAD.**—J. Peart, June 9: Top Level: The south end is only poor; there is a little ore, but scarcely sufficient to pay expenses, but in driving we may soon come to good ore again. The north end is still yielding some nice, not rich, but very fair good ore.—Low Level: This level is very much broken down where we are, and very difficult to deal

with; some water has got into the donke of the vein and it sponges out, so that sometimes it is difficult to get near the place where it is broken down. The washers will be tested on Monday.

**PELYN WOOD.**—T. H. Bennett, June 15: We are expecting daily to reach No. 1 east and west lode. Our counter is gradually enlarging as we drive upon it, and the water flows freely from the bottom of the end. I have no further change to report since last week. I regard the prospects as encouraging.

**PENHALLS.**—S. Bennetts, R. Harris, June 10: The lode in the 80, west end from boundary, is producing some tin stuff, but poor. The 70 east is without much alteration, nor is there much change to notice in the north lode in the 60. The winze below the 55 is worth 20¢ per fathom, and the winze below the 30, ahead of that end, 10¢ per fathom.

**PIONEER (Silver-Lead Mines, Holywell).**—June 13: Bossie's Shaft: The 40 north continues to improve nicely. The men are getting good paying lead-stuff, which is all saved for the dressing-floors. We are expecting now every day to come on the body of ore mentioned previously, proved in the rise a few yards back, and which is dipping towards the end of the level. The tribute pitches maintain the same value as when last reported, and if anything are rather better.—Engine-Shaft: In my last you were informed that we had struck into the long looked for body of ore at the bottom of the shaft. I am happy to say the lead lode cut well, and I have not seen a better lode anywhere before. It is fully 2 yards wide, and producing solid blocks of galena from 2 to 3 cwt. apiece, and in addition to this almost all the gangue or vein stuff is good enough to be saved for the dressing-floors. It looks splendid, and is almost certain to hold out. I am sure that when we come nearer to the junctions of the north and south lodes we shall find lead in abundance.—Dressing-Floors: One parcel of ore has been sold, and we are very busy preparing another parcel for this month, and expect to have a good sale.

**POLKROSE.**—W. Bennetts, June 14: The shaftmen are getting on well with their contract, the shaft is now 3 ft. below the 100. The branch referred to in my last report has come into the lode in the eastern end of the shaft, forming together a lode 4 ft. wide. There is still a horse of killas between the two in the western end of the shaft, but in a few feet sinking they will come together. The lode is composed of pryan, peach, spar, &c., with a little tin; a promising lode. I have set a pump winze to sink below the 100, east of shaft, by four men, at 7¢ per fathom. The men are now engaged cutting ground for winze pit preparatory to sinking.

**PRINCE OF WALES.**—S. Roberts, G. Rowe, June 14: We have no change whatever in Watson's engine-shaft since last week. The men will now commence to cut ground for bearers and cisterns, fix lift, rods, &c., to the 102. The 102 east set to six men, at 8¢, 10¢, per fathom; lode 3 ft. wide, worth 6¢ per fm. for tin. The 102 west to six men, at 8¢, 10¢, per fathom; lode much the same as last week. The 90 end west, to six men, at 17¢, 10¢, per fathom; lode 3 ft. wide, and is worth 8¢ per fathom for tin and copper ore. A stope in back of this level to four men, at 6¢ per fathom; the lode is 5 ft. wide, and is worth 10¢ per fathom for tin and copper. The 90 end east to two men, at 10¢, 10¢, per fathom; lode when last taken down was worth 15¢ per fathom, and it appears to be improving as the men advance. No. 1 stope in back of this level to two men, at 6¢, per fm.; lode 4 ft. wide, worth 5¢ per fm. for tin. No. 2 stope, to four men, at 6¢, per fathom; lode worth 8¢ per fathom for tin. No. 3 stope, to four men, at 6¢, per fathom; lode 3 ft. wide, worth 9¢ per fathom for tin and copper ore. No. 4 stope, to two men, at 6¢, per fathom; lode 3 ft. wide, worth 10¢ per fathom for tin and a little copper ore. We have three tribute pitches working by 11 men; two in back of 90 at 11s., and one in back of the 77 at 13s. 4d. in 1¢ tribute.—Goodluck: Stope in back of the 23 to two men, at 6¢, per fathom; lode 4 ft. wide, worth 15¢ per fathom for tin. ROMAN GRAVELLS.—J. W. Wiersma and Son, June 15: The lode in the 125 north and 125 south of new engine-shaft is without change to notice for some time past. The lode in the 110, north of flat-rod shaft, is 2½ ft. wide, worth 10 cwt. of lead ore and stones of blende per fathom. The 110, south of new engine-shaft, is in a lode 3½ ft. wide, worth about 1½ ton of lead ore per fathom. The lode in the winze in the 95, north of new engine-shaft, is 4 ft. wide, worth 2 tons of lead ore per fathom. The lode in the 95, south of this shaft, is still in the winze, being 3 ft. wide, and worth 1 ton per fathom. The 80, south of said shaft, is worth from 4 to 5 tons per fathom. In the 80, south, the men are not yet through the Big Spar lode. We expect to reach the south shaft time next week. The two stope behind the forebore are together worth quite 16 tons per fathom. All other points in the mine are without change to notice for some time past. We have to-day issued samples of 250 tons of lead ore, for sale on Thursday next.

**RUSSELL UNITED.**—John Bray, June 15: The lode in the 97 fm. level is 4 ft. wide, with good indications for soon making ore. The ground in the cross-cut north at this level towards the great north lode is a little more favourable for opening, and the men are making good progress. No improvement to notice in the 55 east of cross-cut. At Stephen's shaft we have interested more lode standing to the south; we have cut into it 1 ft., and see no south wall. This part of the lode is of a different character, composed of flookan, pryan, little gossan, thickly spotted with grey and black copper ore. Owing to the change the ground has become very heavy, therefore we have had to put in extra timber to keep the shaft secure; this is now completed, and we have again commenced sinking.

**SILVER HILL.**—George Rickard, June 15: We are progressing very satisfactorily with the driving of the tunnel level cross-cut north, towards the Good Luck tin lode. The ground continues of a favourable character, crossing at times good looking branches of mundic and yellow copper ore.—Wheal Brothers Lode: In driving east from tunnel the lode in the present end is over 4 ft. wide, composed of flookan, pryan, and carbonate of iron, with a good deal of sulphurous mudic intermixed throughout, and containing over 12 ozs. of silver to the ton of lodestuff. I will send in a few days a full report, with suggestions for sinking below the tunnel. Machinery running well.

**SORTIDGE COPPER.**—W. Skewes, June 15: The lode in the 30 east has not been taken down since last report, consequently there is no alteration in the value. The lode in the stope in the back of this level is worth 15¢ per fathom.—Deep Adit: We have communicated and let down the water, and been up the level towards the engine-shaft over 80 fms., at which point there appears to be a dam fixed; this we shall be able to say more about next week; it will take pretty much of the time between this and then to place the level in sufficient repair to enable us to make a complete and secure survey. The masons are progressing very satisfactorily, and every effort is being made to get the necessary machinery ready to work by the time the wheel is erected.

**SOUTH CONDERROW.**—W. Rich, W. Williams, H. King, June 14: Marshall's shaft is quite dry, and good progress is being made in sinking below the 50 fm. level. The winze in the bottom of the 50 east is worth 8¢ per fathom. The stope in the back of this level is worth 10¢ per fathom. The 50 end west is worth 9¢ per fathom. The 30 end, east of Plantation shaft, is worth 10¢ per fathom. The lode in the bottom of the 80, east of King's, is worth 12¢ per fathom. The 70 end east yields a little tin. We have communicated the winze and stope in the bottom of the 63, and the men are making good progress. The 60 end, east of Plantation, is worth 6¢ per fathom. The winze in the bottom of the 60, east of King's, is worth 20¢ per fathom. The 50 end east is worth 10¢ per fm. The stope in the back of this level is worth 12¢ per fathom. The 40 end, east of King's, is unproductive at present. The 30 end, west of engine-shaft, is worth 8¢ per fathom. The lode in the back of the 30, east of the cross-course, is worth 15¢ per fathom.

**SOUTH DAREW.**—Henry James, June 15: There is no change to report at the 130. In the 120 west lode is worth from 2 to 2½ tons silver-lead ore per fathom. In the same level east we are driving by the side of the lode. The lode in the 110 east is worth 1½ ton silver-lead ore per fathom. Nothing new elsewhere. The 45 tons silver-lead ore sold on the 9th inst. to Mr. Adam Eyton realised 652½ 10s.

**SOUTH DEVON UNITED.**—Wm. Hooper, June 15: The lode in the 110, east of Brook engine-shaft, is 3 ft. wide, with a value of 12¢ per fathom. I am pleased to say the lode is not disordered as much as it has been during the past 2 or 3 fms. driving, and we have every reason to expect an early and successful result; the end still continues very dry, and we fully expect it until reaching the cross-course, when no doubt we shall drain the 100, when we shall at once commence to sink a winze in the bottom of the above. The stopes in the back of this level are worth—No. 1, 11¢; No. 2, 12¢; No. 3, 10¢; and No. 4, 6¢ per fathom. The lode in the 100, east of Brook engine-shaft, is 3 ft. wide, containing spar, with stones of mundic and copper ore; the ground is very similar to what it has been for some time past—a beautiful light killas, such as all the principal deposits of copper have been in; therefore, we have every reason for believing that other valuable runs of ore ground will be met with. The lode in the rise in the back of the 90, against Martin's shaft, is 4 ft. wide, producing spar, mundic, and stones of copper ore; the rise is about 5 fms.; the men having a long stent, good duty is being done. The stope in back of this level is worth 5¢ per fathom. The lode in the 80, east of Brook engine-shaft, is 4 ft. wide, composed principally of capel, spar, and mundic, with occasional stones of copper. The stopes in back of this level are worth—No. 1, 7¢; No. 2, 5¢; No. 3, 8¢; and No. 4, 6¢ per fathom. The adit level west of old pump shaft continues much as it has been some time past, producing stones of both black and yellow copper ore; for the depth a very fine looking lode. In Pickstone's shaft the men have completed fixing eastern, &c., and are engaged sending down the 12-in. lift of pumps; this will be completed in the course of a day or so, when we shall at once commence to sink with a full staff of men, and every effort shall be made to get this down the required depth by the time stated; we intend letting the whole distance by contract. In Martin's shaft the men are as usual making good progress with the sinking of the above, and are now down to the level of the table engine, cage, stands, &c., has been removed to Martin's shaft, and the ground is being excavated for same; this has our best attention, and will be fixed as soon as possible, which will greatly facilitate the hauling at this place, and also considerably lessen the cost compared to horse labour. All our surface operations are progressing very satisfactorily, and we have for sale on the 20th inst., computed 330 tons of copper ore.

**SOUTH FRANCES.**—C. Craze, June 14: I am pleased to say that during the last fortnight the bottom of the mine has been in fork, and good progress has been made in sinking Pascoe's shaft, the lode in which is of the same value as last reported, worth for 12 ft. long 40¢ per fathom. The 228 east is worth 25¢ per fathom. The 228 west is of the same value, 25¢ per fathom. The stope in the 215 east has improved, worth now 25¢ per fathom; this is a very important feature, as the 228 is 20 fathoms short of this point, and looking at both a good run of tin ground may be expected. No. 1 stope, west of Pascoe's, is also looking well, and worth 30¢ per fathom for 3 ft. wide. All the other stopes and bargains throughout the mine are without change to notice, and Daubur's shaft is being sunk with good speed. Most of the work for the 80-in. cylinder engine for Martin's is on the mine, and the remaining parts we expect some time this week. We shall commence taking out the old one and putting in the new on Monday next, and every effort will be made to complete the work as soon as possible. While this is being done we shall change two pieces of the main rod, some pumps, &c., in the shaft, so as to place the pitwork in as good working order as possible. The new tramway to the stamps and the new calciner is being pushed forward with the utmost vigour.

**SOUTH TOLCARENE.**—Thos. Angove, Samuel Arthur, June 14: The lode in the engine-shaft is 4 ft. wide, worth 15¢ per fathom. In the 60 end west the lode is 5 ft. wide, and worth 12¢ per fathom. In the 60 end east the lode is 6 ft. wide, and worth 8¢ per fathom. In the 50 end east the lode is 6 ft. wide, and worth 8¢ per fathom. In the 50 end west the lode is 3 ft. wide, and worth 5¢ per fathom. The stamping engine-house will be sufficiently advanced at the end of this week to take the roof. We are doing a little preliminary work towards the stamps floor.

**SOUTH PENSTRUTHAL.**—S. Davey, June 13: The lode in Walton's engine-shaft is 8 ft. wide, producing occasional patches of black oxide of copper em-

bedded in a beautiful strata. The flat-rod shaft is cut down to the 130, and skip-rod in. The cutting of the plat will be commenced at once, and the necessary preparations made for sinking below. I am strongly of opinion that sinking another 10 fms. will unveil to us a good bunch of copper from the change that has already taken place at the 130.

**SOUTH WHEEL OREBOR.**—J. Goldworthy, June 15: In the 45 the ground by the side of the lode is a light blue clay slate, of a satisfactory description for the production of copper ore; the wall of the lode has a most favourable appearance. In the rise in the back of the 15 west the ground and lode are congenial for the production of copper ore.

**TAMAR.**—R. Goldworthy, June 14: Good progress has been made in rising against the new shaft. The ore-bearing part of the lode, where cut to, was 2 ft. wide, spotted with lead throughout, and from its promising appearance we look for a further improvement when next cut into. The lode in the 57 is 3 ft. wide, all saving work for silver-lead. This is the most productive piece of ground I have seen in this level. The ground in the cross-cut is much the same as when last reported. No other change to notice.

**TASKERVILLE GREAT CONSOLS.**—A. Waters and Son, June 15: Tankerville Mine: Watson's engine-shaft, in No. 1 north lode, is now down 10 fms. 2 ft. below the 223 fm. level; the lode at present is worth from 20 to 25 cwt. of lead ore per fathom. All other points in the mine are up to the values given in last week's setting report.—Potter's Pit Mine: The lode in the present bottom of the 105 is getting wider, and improving for lead ore as we go down. The heat is more intense than ever, and seeing that the ore is getting more solid we are looking forward to an important discovery in depth. No other change to notice here.—Pennerley Mine: Our full report of last week fairly describes all the points as they are to-day. We have all the steam-pipes and connections to attach the pumps to the boiler, and the men are about this work day by day. We hear that the air-pipes are on the way to the mine. It would not now take long to get the rock-drills at work.—Bog Mine: The water is in fork in the 143; the shaftmen are securing ground, and putting in casings and dividings preparatory to dropping the lift below the said level. Good tribute ground for lead and blende is to be seen in the 143 west. The shaft is in good working order to the 143, and some rich ore stuff has been drawn from this level to-day. The pitches throughout the mine have slightly improved in value since last week. The carpenters are busy fixing machine figgers, putting up shed, &c., and we hope soon to have nice dressing-floors here. The samplings to-day are as follows:—Tankerville, 50 tons of lead ore; Pennerley, 45 tons of lead ore; Bog, 45 tons of lead ore; equal 105 tons. The usual quantity of blende will be sampled at the latter mine next week.

**TREAVANANCE UNITED.**—William Vivian, June 15: The 55 driving east on the North Lode: Lode about 2 ft. wide, very kindly in appearance, and producing a little tin.—Cross-cut driving South of Middle Shaft: We continue to meet with branches of spar, mundic, and a little tin. We sold a parcel of tin yesterday at 58¢ 2s. 6d. per ton. The prospects of this mine are very encouraging.

**TREGBEMO.**—E. Chegwin, June 12: The ground in the engine-shaft still continues fairly good for sinking. Next Saturday being our setting day I shall be able in my next report to give you exact particulars as to number of fathoms sunk during the month. The adit level driving east of Pinnick's shaft on Tregembo lode, the lode is 5½ ft. wide, and still continues worth for tin ore 35¢ per fathom. The cross-branch which we found a few days ago (or lode) south-west from Tregembo lode, is now 1 ft. wide, and worth for tin ore 6¢ per fathom. Since driving on this branch we have intersected east and west, rich tin branches. By the end of the week I hope to be in a position to report more fully on our operations at this point. All surface work in a forward state.

**VAN CONSOLS AND GLYN.**—J. Roach, June 14: The 70 is driven west of No. 2 cross-cut on north wall of lode 5½ fms. That portion carried in the drive consists of vein stone, with a little lead ore throughout. From appearance improvement for lead may be daily expected. The vein stuff from rise above this level is all being sent to the dressing-floors. No alteration has taken place in any other exploratory bargain since my last advice. 50 west of Gundry's is getting in that position to induce us to expect a sudden change in the lode. The stope continues the same in character and quality as for some time past. We have 10 tons of lead raised, and hope to add to that quantity quickly. All work going on as usual, and the plant and machinery in good order.

**WEST CARADON.**—N. Richards, June 14: Vivian's north lode in the back of the 50 is about the same size and value as when reported on last week. A stope east of rise is yielding 1½ ton of copper ore per fathom. A stope west of ditto 1 ton of ore per fathom. A stope in the back of the 38 on this lode will yield 1 ton of ore per fathom. A rise in the back of this level will yield 1½ ton of ore per fathom. A rise in the back of this level is slightly improving in appearance, but is about the same value; the lode in the end, yielding 1 ton of ore per fathom. The stopes in the back of this level are yielding 1 ton of ore per fathom, but I think from the general character of the lode we shall soon get a further improvement. This lode in the 38, driving west of main cross-course, is without change to notice. We have now reached the rise in the 38 cross-cut north, on Taylor's lode, and a pair of men are engaged clearing and securing the same. We have also commenced driving west on this lode, in this level, the lode at present yielding 1 ton of copper ore per fm. We have also commenced a shaft in the course of the lode, which is about 12 fms.; the lode is large, over 3 ft. wide, and well defined.

**WEST CREBOR.**—J. Andrews, June 14: There is scarcely any change in the mine since the general meeting held on Friday last, but we shall commence to drive east and west at the 50 on the course of the lode in a day or two.

**WEST DEVON GREAT CONSOLS.**—G. Rowe, June 14: Our progress in sinking the engine-shaft is very satisfactory, now down about 30 fms. below the surface, where the lode improves in size to 3 ft. wide, and the strata everything that can be desired for the production of minerals, and may strike a rich lode any day.

**WEST GOLDFIELD.**—T. Hodge, F. Hodge, June 13: Wilson's Lode: The 80 east end produces stamping work. The same remark will apply to the 80 west. We have a pair of men shooting down the south part of the lode, behind said end, where the lode is worth 10¢ per fathom. The 70 west end is worth 6¢ per fathom, and letting out much water, fast draining the levels above. The 60 west is worth 6¢ per fathom. In the 50 west we have met with a small crossing 6 in. w. m., principally spar. When we get off its influence we have no doubt but what there shall be a run of tin ground. We are very hopeful in this direction. The stope in the back of said level is worth 14¢ per fathom. The rise in the back of the 60 west is going up in a small cross-course. The lode at present is not so productive as hitherto, producing stamping work. The 70 east end is going out in a very promising lode indeed; it is well defined, and carrying regular walls, embedded in a mineralised granite. In our opinion there is nothing wanting but a dropper or feeder to the vein to make it profitable and productive. Surface work is going on satisfactorily.

**WEST KITTLY.**—William Vivian, June 15: The 10 Fathoms Level driving East: Lode worth 25¢ per fm. Stopes in the back of the 72 Fathom Level: Lode worth 25¢ per fathom. —Rise in the back of the 60 Fathom Level: Lode worth 25¢ per fathom. No change to notice in the other points of operation since last week.

**WEST POLBREEN.**—William Vivian, June 15: In the 30 east we have a very fine looking lode at this point 3 ft. wide, producing a little tin but not to value. We are putting up a horse wheel on the eastern part of the mine to work the lode referred to in my last report.

**WHEAL GOLDSUE.**—John Gilbert, June 15: The lode in the 105, west of Richard's shaft, is 5 ft. wide, and still worth 4 tons of rich copper ore per fathom. There is no change in any other part of the mine. To-morrow is our pay and setting day, after which we will send you the usual monthly report.

**WHEAL PEEVOR.**—W. T. White, James Pryor, June 15: We cannot speak of any particular change in our underground operations. The mine is opening up very satisfactory, and we hope in our next report we shall be able to report the cutting of the lode west of the cross-course. The ground in the cross-cut present appearance is of the lode being near. The lode in the 48 west is still holding good, and maintaining its value as last reported—worth 20¢ per fathom. The main winze sinking in bottom of the 48 is being sunk with all dispatch possible, so as to get down to the 60, where we feel quite sure we shall open up a splendid run of tin ground. The lode in the winze is improving in size and value as we sink. We expect to reach the 60 in another five weeks. We are getting on vigorously with our surface work. The new calciner is built, and the masons are now busy putting on the roof. The carpenters are now about the tin yard, and we calculate to get this ready as soon as the flues of the calciner are built. We had a sale of tin stuff on Friday last; 153 tons of stuff realised 440¢. The average produce of this was 1 cwt. 1 qr. 3 lbs. per ton. This is the production of a fortnight, and we shall have another sale again next week.

**WHEAL COATES.**—William Vivian, June 15: The 80 cross-cut, driving south of engine-shaft, by six men, to intersect West Kittly lode; the branches and country rock are now underlying north. This is a decided change from anything that we have seen before. The 80, driving west on the south lode, is worth 7¢ per fathom. In the 70 driving east the lode is worth 9¢ per fathom. In the 60 driving east the lode is large and producing a little tin ore, but not to value. In the 60 fm. level driving west the lode is worth about 7¢ per fathom. In the 50 driving east the lode is worth about 6¢ per fathom. In the 20 driving east the lode is worth about 8¢ per fathom. The tribute pitches are producing their usual quantity of tin. We sold yesterday over 8 tons of tin at 58¢ 12s. 6d. per ton. We are now making some repairs to our stamp engine, therefore, the stamps will be idle for about a week.

**WHEAL CREBOR.**—George Rowe, Henry Phillips, June 13: Setting Report: The 132 east driving by six men, at 12¢, per fathom; the lode is 3 ft. wide, producing good stones of ore. The 132 west shaft to cross-cut south, by four men stent 2 fathoms, or cut the south part of the lode, supposed to be in that direction, at 6¢, per fathom. The No. 1 winze to sink below the 120, by six men, stent the month, at 12¢, per fathom; the lode going down is 5 ft. wide, worth 25¢ per fathom. No. 2 winze to sink below the same level, 120, on the south part of the lode, by six men, stent the month at 14¢, per fm.; the lode carried is 6 ft. wide, worth 20¢ per fathom. The 105 end east, to drive by two or more men, stent the month at 9¢, per fathom; the lode is small and unproductive. The 108 cross-cut to drive north by six men, stent the month at 7¢ 15s. per fathom; the ground is a little stiffer for progress. The stope in the bottom of the 108, by two or more men, stent the month at 5¢ 10s. per fathom; the l



fine, against 2321 tons June 15, 1881. Stock of Chili bars and ingots in Havre, 2794 tons fine, against 3342 tons June 15, 1881. Stock of Corro barilla in Havre, 163 tons fine, against 326 tons June 15, 1881. Stock of copper other than Chili in Havre, 310 tons fine, against 1015 tons June 15, 1881. Stock of Chili copper float and chartered for to date, 10,070 tons fine, against 10,800 tons June 15, 1881. Stock of foreign copper in London, chiefly Australian, 8250 tons fine, against 9541 tons June 15, 1881.

According to the Board of Trade Returns the total imports and exports into and from this country for the first five months of the following years were:—

IMPORTS.	1880.	1881.	1882.
Copper ores	5,156	3,953	4,204
Copper regulus and precipitate	11,222	11,586	11,017
Bars, cake, and ingots	16,609	10,992	14,034
In pyrites, estimated	7,682	5,803	6,938
Total	40,669	32,334	36,193

Exports.

English copper—wrought and unwrought <th>Tons</th> <th>1880.</th> <th>1881.</th> <th>1882.</th>	Tons	1880.	1881.	1882.
English copper—wrought and unwrought	Tons	11,895	13,287	10,788
Foreign copper—unwrought		6,608	4,575	4,813
Yellow metal		6,158	6,170	7,644
Total		24,659	24,032	23,245

According to advices from Valparaiso the comparative exports of fine copper from Chili and Bolivia to all parts of the world during the first three months of the following years were:—

	1880.	1881.	1882.	1883.	1884.	1885.
10,784	8,200	11,838	12,242	11,909	12,590	12,590
The relative proportions per cent. of the different descriptions of copper being—						
Bar copper	83.56	83.79	84.10	70.95	80.49	70.73
Copper regulus	9.83	15.41	13.40	24.04	16.32	20.01
Copper ore	0.61	0.62	2.50	5.01	3.19	9.26
Total	100	100	100	100	100	100

In the MINING SHARE MARKET the dealers have been chiefly occupied in the settlement of the usual fortnightly account, and business transactions, either for investment or speculation have been of a very restricted character; consequently shares generally are difficult of sale, with quotations of prices lower and almost nominal. Among the mines dealt in have been West Kitty, West Crebor, Wheel Crebor, East Blue Hills, Devon Great Consols, Sortridge, West Caradon, Wheel Basset, Killifreth, Bedford United, and a few others.

Tin has been steady during the week, and no change has been made in the standard for ore in Cornwall. Shares, however, have been weaker, more freely offered, and less dealt in. In fact, there has been a general absence of any activity in all the stock and share markets. Blue Hills, 1 to 1½; Cook's Kitchen, 35 to 37; Carn Brea, 12½ to 13½; Dolcoath, 70 to 72; East Pool, 52½ to 53½; East Lovell, 1 to 1½; East Blue Hills, 9s. to 11s. The sale of tin for four weeks, 2 tons 14 cwt., realised 154½. 7s., and the mine is looking well. Killifreth, 5½ to 6½.

Phoenix, 2½ to 3½; South Condurrow, 8 to 8½; South Frances, 12 to 13; Tincroft, 13½ to 14½; West Basset, 10 to 10½; West Peavor, 11½ to 12½. Wheel Agar, 14 to 15; Wheel Basset, 10½ to 10¾; Wheel Grenville, 10½ to 11; Wheel Jane, 1 to 1½; Wheel Kitty (St. Agnes), 1 to 1½; Wheel Owles, 10 to 10½; Wheel Peavor, 9 to 10; New Kitty, 1½ to 2. West Kitty, 9 to 9½; the rise above the 60 is valued at 26½ per fathom; stopes in back of 72, 35½ per fathom; 80 end east, 25½ per fathom. Since the last meeting in March 50 tons of tin have been sold; the sale on Thursday, 7 tons 19 cwt., brought 58½. 12s. 6d. The steam stamps will be at work shortly. Trevaunance, 2½ to 2¾; the 55 east on north lode is 2 ft. wide, and producing a little tin; a parcel of tin sold on the 14th realised 58½. 2s. 6d. Wheel Coates, 2 to 2½; the sale of tin on 14th, 8 tons, realised 58½. 12s. 6d. per ton. Drakewalls, 2 to 2½; Goodever, 1 to 1½; Kit Hill, 2 to 2½; New Trumpet Consols, 1 to 1½; South Crofty, 10 to 11; West Polidice, 5½ to 5¾; Wheel Sisters, 1 to 1½; St. Aubyn United, 1 to 1½; North Busy, 2 to 2½. Wheel Uny, 3½ to 3¾; the mine is looking better in the 170 west.

COPPER has been firm and advancing, but very little business done in shares, which are flat and rather declining in price, owing to the absence of business. Bedford United, 1½ to 2; Carnarvon Copper, 2 to 2½; Devon Great Consols, 6½ to 7; Devon Great United, 2 to 2½; East Caradon, 2 to 2½; Gunnislake (Clitters), 2½ to 2¾; Hingston Down, 2 to 2½; Marke Valley, 2 to 2½; Mellanear, 4½ to 5½; New Cook's Kitchen, 6½ to 7; New West Caradon, 2 to 2½. Parys Copper, 10s. to 11s.; the mine is looking better in one or two points. Prince of Wales have been largely dealt in, and leave off 9s. to 11s. South Devon United have improved to 2½. 1½. West Caradon, 2 to 2½; West Crebor, 2 to 2½; no change in the mine. West Seton, 15 to 17. Devon Friendship, 4s. to 6s.; a new stope in the back of the 30 west is worth 4 tons of arsenical munda and 1 ton of copper ore per fathom. Last month's sale of arsenic was 70 tons. Sortridge, 5s. to 6s.; the erection of dressing machinery progresses rapidly. Wheel Crebor, 2½ to 3½; No. 1 winze below the 120 is worth 25½ per fathom. No. 2: the part of the south lode carried is 6 ft. wide, worth 50½ per fathom; the 48 east, 10½ per fathom. The various points in the aggregate are now worth 190½ per fathom. West Tolgas, 15 to 17; Mona, 4 to 5; Mona Consols, 1 to 1½; Gawton, 9s. to 11s.; West Devon, 2 to 2½.

LEAD.—Scarcely any business doing in lead mines, and quotations nominal. Van are quoted 6 to 6½; Great Laxey, 17 to 18; Roman Gravel, 8½ to 9½; East Roman Gravel, 15s. to 17s. 6d.; there is a good lode in the 90 south. Tankerville Consols, 4s. to 6s.; they have sampled 105 tons of lead ore. South Darren, 10s. to 15s.; the 45 tons of lead ore sold on June 9 for 652½. 10s. D'Ereshy Mountain, 1 to 1½; Frongoch, 1½ to 2½; Goginan, 2 to 2½; Grogwinion, 2 to 2½; North Grogwinion, 1 to 1½. New Wye Valley has sold 50 tons of blende at 2½. 7s. 6d. Coed-y-Pedw, 1 to 1½; Sinclair, 1 to 1½; West Holway, 1 to 1½; Great Holway, 5½ to 5¾; Pennant, 4½ to 5; Goddard's Lead, 1 to 1½; the lode here is very promising for the depth. Gorsedd and Merilyn, 2 to 2½; Lead Hills, 1½ to 2; Minerva, 9 to 10; United Van and Glyn, 2 to 2½; West Lisburne 1 to 1½.

FOREIGN MINES.—Akankoo, 2 to 2½; Alamillos, 1½ to 1¾; Almada and Tiritio, 2 to 2½; Broadway Gold, 3½ to 4; Canadian Copper and Sulphur, 1½ to 1¾; Cape Copper, 52½ to 53½; Chile Gold, 2 to 2½. Colar Gold, 2 to 2½; they commenced crushing at the mines on June 1, and have 2000 tons of good lodestuff at surface; samples of this treated at Glasir by the Britton-Readwin process gave 1½ oz. of gold to the ton. Devala Moyar, 1½ to 1¾; Devala Central, 2 to 2½; Fortuna, 4 to 4½; Frontino and Bolivia, 3 to 3½; Indian Consolidated, 2 to 2½; Indian Glenrock, 1½ to 1¾.

Indian Phoenix, 1½ to 2; Indian Trevelyan, 13-16 to 15-16. Kapanga, 2 to 2½; a telegram to-day states that they have crushed 50 tons of quartz, which yielded 150 ozs. of gold, and that all is going on well. La Plata, 1½ to 2½; last week's smelting states that they purchased 933 tons, and smelted 845 tons, the produce being 16,000 ozs. of silver and 185 tons of lead; the value of the consignment was 6250½. Linares, 4½ to 4¾; Mysore Gold, 2 to 2½; Nouveau Monde, 7-16 to 9-16; Ooregum, 2 to 2½; Rhodes Reef, 2 to 2½; South-East Wynaad, 3½ to 4½; Tambracherry, 1½ to 1¾; Wentworth Gold, 2 to 2½; Wynaad Perseverance, 1½ to 1¾; Bratsberg, 1½ to 1¾; Copiapo, 3½ to 3¾; Don Pedro, 3s. 9d. to 6s. 3d.; New Quedrada, 4½ to 4¾; Panulillo, 6½ to 6¾; Richmond, 8½ to 9½; Ruby, 2½ to 2¾; St. John's del Rey, 170 to 180. Organos, 2 to 2½; a large business is said to have been done here, and the mine reported to be rich at several points. The machinery has all arrived, and will take about two months to erect. Chile Gold, 10s. to 12s.; Colombian Gold, 8s. to 10s.; Corporation of South Australia, 1 to 1½; New Emma, 2 to 2½; Potosi, 2 to 2½; Nouveau Monde, 7s. to 9s.; Tolima, 2½ to 3½.

The Market for Mine Shares on the Stock Exchange has been entirely neglected as regards British mines, and the depression in the price of metals makes the prospect anything but encouraging. In foreign mine shares, however, there has been a good business done and in some cases prices are decidedly better. Chile Gold has been dealt in to-day as high as 10s.; Colorado United at 1½; Frontino and Bolivia at 3; Kapanga at 15s.; La Plata at 2; Nouveau Monde at 10s.; Panulillo Copper at 6 3-16; Richmond at various prices between 9 and 9½, and much business doing. Rio Tinto bonds have been done at 103, and shares at 24½ and 24¾; Ruby and Dunderberg at 2½ and 2¾; South Australian, 1½; and Sierra Buttes, Plumas Eureka, 1½. The Ontario Silver has declared its usual dividend of 2s. per share.

Our usual telegram from Cornwall this evening states that during the past week a quiet tone has characterised the Cornish Mine Share

Market, the unsettled state of the price of tin in the London Metal Market having caused business to be restricted. Carn Brea, Cook's Kitchen, Tincroft, West Basset, West Peavor, and some other shares are weaker, but Wheel Basset, after fluctuating, close at 10 to 10½. Killifreth are stronger, and Croftys have been more enquired for, and close a trifle better. The next Billiton auction will take place on the 27th inst., when 11,500 peculs will be offered. Carn Brea, 12½ to 13½; Cook's Kitchen, 35½ to 36½. East Dolcoath, 70½ to 70¾; East Pool, 53½ to 53¾; Killifreth, 5½ to 6; New Cook's Kitchen, 6½ to 7; North Busy, 2 to 2½; Pedn-an-drea, 2½ to 3½; Condurrow, 8 to 8½; Crofty, 10½ to 10¾; South Frances, 12 to 12½; Tincroft, 13½ to 14½; West Basset, 10½ to 10¾; West Frances, 9 to 9½; West Kitty, 8½ to 8¾; West Peavor, 11½ to 12; West Seton, 17 to 17½; Agar, 14½ to 14¾; Wheel Basset, 10½ to 10¾; Wheel Peavor, 9½ to 10.

In Indian Mine Shares there has been a considerable amount of business done, but prices have not materially varied. The commencement of regular work in the Wynaad district has already been announced, and the Mysore district seems to have been not far behind, for it appears that the Colar Gold Mining Company commenced crushing on June 1. A letter from the field states that there were over 2000 tons of good lode stuff at surface ready to operate upon. Samples of this were sent home time since, and by assay by Messrs. Johnson and Matthey gave over 2 ozs. of gold to the ton. This must have been about a fair sample, as it seems that some of the same ore worked by the Britton-Readwin process yielded in bulk over 1½ oz. to the ton. Results from the crushing of 100 tons may, it is remarked, now be looked for at once. The closing quotations of the shares of this class principally dealt in were:—Colar, 2 to 2½; Devala Moyar, 1½ to 1¾; Devala Central, 2 to 2½; Indian Consolidated, 2 to 2½; Indian Glenrock, 1½ to 1¾; Indian Phoenix, 1½ to 2; Indian Trevelyan, 13-16 to 15-16; Mysore Gold, 2 to 2½; Ooregum, 2 to 2½; Rhodes Reef, 2 to 2½; South-East Wynaad, 3½ to 4½; Wynaad Perseverance, 1½ to 1¾.

In Electric Light Companies shares there has been practically nothing doing except in Parent Brush's, Hammond's, and Electric Power and Generator; and of these the last is very seldom heard of. The principal dealings to-day have been in Anglo-American Brush (4½ paid), which commenced at 29½, fluctuated down to 28, and left off 29½; the fully paid shares declined from 56½ to 52½; Hammond opened and closed at 15, but there were transactions 5s. lower and higher during the day. There is a strong disposition among outside holders to realise and take their profits, but it is by no means easy to find purchasers without submitting to a sacrifice as compared with current quotations. This afternoon several gentlemen interested in electric lighting availed themselves of an opportunity of examining a new dynamo just received from America, and now at Haggerston, not two miles from the Stock Exchange. It is said to be as efficient as the Gramme, Brush, or Gölcher, and that it can be supplied to the user at from 30% to 50%. Details will probably be given next week.

The Cankim Bamoo Gold Mines, Gold Coast of Africa, has been formed with a capital of 100,000£, in shares of 1£ each, to purchase from the Appolonia Syndicate the lease for 99 years, at a rental of 1000£ per annum, the mines of the same name, about one square mile in extent. The prospectus states that Cankim Bamoo, which is situated in close proximity to the coast, one mile from Sarlman (or Salmomen), and about 17 miles from Axim, has long been known as the most renowned mining camp of the Axim district. There are a vast number of native pits sunk on the property, showing long and persistent working, and it is well known that whenever aboriginal workings are found to have existed on a large scale in any part of the world a rich harvest remains for those who come after with adequate machinery. The contract of purchase provides that from 20 to 50 tons of ore should be brought immediately to England, taken by an officer of the company, and should it be found that the ore taken in bulk from the mine does not at least average 1 oz. of gold to the ton all the monetary payment will be forfeited to the company. This stipulation will prevent the company from parting with money until they are assured that the property is of value; while the fact of having so large a quantity of the ore in this country will enable the directors to have the ore treated in a manner that will enable them at once to select the most suitable machinery, and thus avoid the delay and useless expenditure that has characterised most gold mining enterprises. The samples of ore sent over to England were submitted to Mr. Claudet, assayer to the Bank of England, to whom they were sent direct in bulk. He found gold and silver in all the samples, and as depth increased so did the richness of the ore. From one-half of the whole bulk of the sample taken at a depth of 24 ft., Mr. Claudet obtained an average of 2 ozs. 5 dwts. of gold to the ton. A tabulated statement is given showing that nearly 81,000£ per annum may be realised as profit. It is added that Mr. Wulken in his annexed report to the directors of the Appolonia Syndicate says: "As regards these samples I am sending to England there is no selecting done whatever. At the old incline I put in four blasts and the stuff was put into sacks as it came to hand." Mr. Wulken is an experienced Californian miner, and the directors place great reliance on his integrity. The property contains a supply of wood in abundance, and as will be seen by the map, is intersected by a splendid stream of water, which latter greatly enhances the value of the property for hydraulic or placer working.

The Wassau (Gold Coast) Mining Company, with a capital of 100,000£, in shares of 1£ each, has been formed to purchase for 75,000£ (41,700£ in cash and the rest in shares), and further develop an extensive mining property at Wassau, the western province of the Gold Coast, and now being worked by Messrs. F. and A. Swanzy, African merchants, through whose hands, it is said, over 1,000,000£ of gold dust from the neighbourhood, under the primitive mode of barter still practised by the natives. Being satisfied that all this gold, together with the large quantities imported by other persons must have come from reefs, which only required skilled prospecting to discover, Messrs. Swanzy about four years ago engaged an experienced engineer, caused a careful examination of the country to be made, and eventually secured the estates now proposed to be transferred to the present company. Large sums of money have been expended upon the development of the property, as well as in building the village of Crookerville, erecting three engines, 12 heads of stamps, steam-pump, saw-frame, saw-bench, supplying tramway rails, wagons, tools, materials, and other mining equipments. Finding, however, the further outlay of time and money required for thoroughly developing the estates on a fitting scale to be beyond the ordinary resources of a mercantile firm, they have resolved to sell to a company. The prospectus states that the property, which is situated on the right bank of the river, will doubtless be found upon a further clearing and examination of the forest. One is known as Crocker's reef, and is from 4 to 5 ft. thick. It appears to run through the greater portion of the property. Two shafts have been sunk on Crocker's reef to a depth of 70 to 80 ft., and its value as an auriferous vein has been established beyond doubt. A bulk sample from this reef, assayed by Messrs. Johnson, Matthey, and Co., gave a result of 3 oz. 7½ dwts. to the ton of ore. It is, therefore, claimed that the strong points in favour of this company are that it offers to the public a proved reef; that it has not to wait the result of washings to ascertain the value of the reef, and that it is already well equipped with machinery, which machinery can at leisure be improved and supplemented. All the preliminary work in fact is done. The reef running in a parallel direction is from 4 to 20 ft. thick, and being nearer the river can be worked with less expense. As rich quartz has been discovered in course of sinking, it was intended to open up Crocker's reef, but as the present pump proves insufficient, and rich lodes of alluvial deposits had been found which could be more easily worked, the operations on this reef were suspended. Shafts were then sunk on the Aja Bipa lode to a depth of from 35 to 45 ft. only, with this result, that 50 tons of ore fairly taken and crushed at Crocker's reef produced 41 ozs. of gold of standard quality, and 11 tons and one of the strakes, which assayed, according to Messrs. Johnson, Matthey, and Co.'s report, 5-625 ozs. to the ton, the whole being equal to over 2 ozs. gold per ton of ore crushed. This lode is ascertained to be from 22½ to 30 in. thick, and it is estimated that the company will have over 2700 running feet to work upon, and that to a considerable depth before reaching the water level. The company being, in fact, taken over as a going concern it is considered that it should pay dividends at an early stage of its career. The lists of applications for shares close on Monday.

Mr. William Crookes, F.R.S., of Kensington Park Gardens, has joined the board of the Gölcher Electric Light and Power Company. Devon Great Consols, 7 to 8; the month's sale of copper ore—934 tons—will take place next week. The 137 fm. level end east which is in whole ground almost to surface, is said to be looking promising for something good at no distant period. The manager states in his report this week—"The lode has improved, yielding now good stones of copper ore and munda, and its general character is of a most promising nature." A good discovery here would be a great thing for the company, as there is a large tract of entirely undeveloped ground standing eastward belonging to the company, traversed by well-known rich lodes.

Devon Great United, 2 to 2½; the agents report that some little delay has taken place with operations in the shaft, but the work is again progressing satisfactorily.

Kit Hill, 15s. to 16s.; the rock-drills in the Great Tunnel level are expected to be ready and set to work this week.

South Devon United, 2 to 2½; shares have been in better demand during the week, and, as will be seen by the agent's report, the mines are looking better. The sampling of copper ore which is for sale on the 20th inst. is computed at 320 tons.

Drakewalls, 2 to 2½, and in demand. The annual general meeting will be held on Monday. The report of the managers and statement of accounts are considered satisfactory, and a report of the meeting will be given in next week's Journal.

West Wheel Seton, 16 to 18; the lode in the shaft, as well as the

bottom levels driving east and west, continue to look well. The shaft will soon be down to another level, and driving will be commenced east and west in a rich course of tin ground.

South Wheal Frances, 12½ to 13, and reported to be in demand. Good progress has been made in sinking Pascoe's shaft, where there is a rich lode for tin, worth 40½ per fathom. The 226 east is worth fully 25½ per fathom, and the driving westward is worth 25½ per fathom. An important improvement has also taken place in the 215 east, where there is a lode worth 25½ per fathom. All other operations at mines progressing well.

Kapanga of New Zealand, 2 to 2½; it appears that a still more satisfactory telegram has to-day arrived from the mines reporting "50 tons crushed, producing 150 ozs. of gold, all going on well." If anyone, writes a correspondent, will only realise what this means, and should such returns only continue, it is a matter of certainty that this mine will prove one of the most remarkable of the age. The two last telegrams showed 2½ ozs. to the ton, but this last telegram shows 3 ozs. to the ton.

Richmond, 8½ to 9½; the usual telegram from the mines states that the week's run was \$24,000 from 467 tons of ore. During the week the refinery produced doré bars to the value of \$23,000. The superintendent's weekly report (May 22) states that the 400 south from cave over 15 chamber has been run 19 ft. in limestone. Commenced 9th for purpose of exploration. The 800 north-west drift from west drift (Burleigh drill) has been run 25 ft. in limestone. The 800 north drift from quartzite (Burleigh drill) has been run 21 ft. in stratified limestone. The 900 north drift from west drift (Burleigh drill) has been run 24 ft. in limestone. The 900 north-east drift from north drift (Burleigh drill) has been run 25 ft. in limestone. Indications in this drift continue favourable for ore.

Ruby and Dunderberg, old, 2½ to 2¾; new, 1½ to 1¾ prem.; the weekly report advises good progress in the developments in the Dunderberg Mine. Stopping has now been commenced on the No. 8 ore body above the 700 ft. level. There are very favourable indications in the 600 ft. level (above No. 8 ore body), a seam of ore having been followed for 18 ft. Owing to favourable ground for drifting, good work had been done during the week both at the Lord Byron tunnel and at the drift being run at the Bullwhacker Mine. The weekly telegram advises a small shipment of 77 tons from the mines.

Eureka, Nevada (Silver), 2 to 2½; the weekly report is considered satisfactory, the ore in the south drift (150 ft. level, Bald Eagle) being better in quality than it has ever been. A telegram also to hand this week advises a shipment of 27 tons of good ore, and judging from this it is thought that arrangements have been made for shipments on a regular basis.

The Flagstaff District Silver Mining Company's chairman, Prof. Vincent, sailed for New York on Thursday in the City of Rome, en route for Utah. It is understood that the Professor hopes to commence the shipment of Flagstaff ore immediately on his arrival at the mine; and from the recent favourable reports received from Capt. Gundersen it would seem highly probable that this hope will be realised.

Isabelle, 2 to 2½; it appears that the Superior Judge and other legal officials visited the company's Stella Mine on May 18, and gave an account of what they saw in the mine to the Markleeville Monitor Argus. The recent discovery of the new ore body at a point west of the tunnel, and about 60 ft. above the tunnel floor has, it is said, created a sensation among mining men. The former owners seemed to have failed, simply because their efforts were directed in the wrong direction, they seeking the ore body east of tunnel, while it has now been demonstrated that the ore body is west of it, though beyond a doubt ore may be found east by sinking to a greater depth than yet done. The chambers disclosing the new body of ore is 16 ft. from north to south 13 ft. from east to west, and 13 ft. high. The roof, face, and ends of this chamber are in beautiful ore, of great richness, its assay value ranging as high as \$500 per ton in gold, silver, and copper, about 80 per cent. of this being silver. Two miners only were engaged in breaking down the ore, who are able to keep the mill running at its present capacity. From 40 to 60 tons of rich ore were piled on the sorting floor at the tunnel mouth.

La Plata, 2 to 2½; the smelting statement for the week ending on Saturday states that the quantity of ore purchased was 933 tons, and the quantity smelted 845 tons, the produce being 16,000 ozs. of silver and 185 tons lead. The silver-lead bars consigned to refiners was 155 tons, and the value of the consignments was \$30,000, or 6250½.

Organos Gold, 1½ to 1¾; a large business has been reported during the week, and it is said that one of the workmen has returned from the mine, giving a glowing account of its character and prospects. Some parts of the mine yield as much as 10 ozs. of gold to the ton, and the quartz already laid open for crushing as soon as the machinery is completed is thought to be worth from 40,000£ to 50,000£. The machinery will be in working order and ready for crushing in about two months.

Sentein, 2 to 2½; it is reported that the returns for last month were 104 tons, of nearly all first quality lead, and 210 tons of first quality blende. The prospects are considered cheerful, as the company has been successful in raising their fresh capital.

In Lead Mine shares there has been extremely little doing, and it is difficult to effect sales except at a heavy sacrifice, but a correspondent writes that the information he has "this week received from various sources most assuredly points to an improved demand for lead—indeed some predict a rise of 3½ to 4½ per ton at no distant period, and already an improvement has taken place in the price of lead ores. This is good news for all home lead mines."

Roman Gravel, 9 to 9½; the 80 end south has improved to about 5 tons of lead ore per fathom, and two places in the 65 south are producing 16 tons of lead ore per fathom, or worth together (say) 160½ per fathom. The sale of 250 tons of lead ore takes place next week.

Tankerville Great Consols, 2 to 2½; it appears from the manager's report that some important discoveries are expected in each of the three mines belonging to the company. The samplings of lead ore made this week are computed at 105 tons, and are for sale next week. The blende samplings will take place next week.

Bwlch, 1 to 1½; the report states that the stope in the back of the 50 has improved, and is now worth from 1 to 1½ ton per fathom. A parcel of 20 tons of silver-lead ore was sampled on Saturday.

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## Notices to Correspondents

**PERSONAL LETTERS**—"S. Y." (Kelvin-side, Glasgow).—Your request that because the publication of a letter has been refused as too personal, it should be forwarded to you for perusal, though you "only want it for curiosity," is unique. Had you not marked your application "not for publication," it would have been worth printing as a literary curiosity, to be permanently preserved. On this side of the Tweed men are taught to be cautious.

**Received**—"W. T." (Schull)—"F. K."—"G. H. P." (Dublin)—"S. L." (St. Mewan)—"Shareholder" (Great Laxey)—A letter respecting North Croft, Wheel Seton, and Roskar Mines—"A Fully Paid Shareholder" (Old Shepherd Mine)—"H. F."—"G. E. D."—"Constant Reader" (Sheffield)—"Scrutator" (Ambergate)—"Shareholder" (South Caradon)—"One Interested" (Yeovil) should write to the Secretary for the information he requires—"Shareholder" (Rio Grande) should have appended his name to the letter he wishes us to publish—"The Captain" (whose report "has been most untruthfully assailed.") The result must prove the correctness of the different statements. The insertion of further letters is useless.

## THE MINING JOURNAL,

Railway and Commercial Gazette.

LONDON, JUNE 17, 1882.

## THE SYSTEM OF WORKING IN SALT MINES.

The present state of the salt mines in Cheshire, owing to the slips and sinkings constantly going on, and which promises ultimately to swallow up a vast area of ground now covered with houses and buildings, gives to the district a more than ordinary interest. Little more than a year ago, near to Northwich, there was a subsidence of a most extraordinary character, so that the River Weaver, and what is known as the Top Brook, were lowered fully a foot over 160 acres in about four hours, whilst there was an enormous sinking like a vast shaft, into which it was computed that not less than 600,000 tons of water rushed. The shaft, or hole, formed by the subsidence was fully 200 ft. in diameter, and sloped gradually down, and in addition to the water it absorbed about 40,000 tons of earth. Not so long since a church, a chapel, and some other buildings were condemned as unsafe, and as the brine and salt are drawn away the subsidence will go on increasing in a corresponding ratio. The prospects of the Cheshire salt miner are, therefore, by no means cheering, for the mines at almost any time are liable to be inundated with water, and on the occasion to which we have referred to the water rushed into an old mine, forced the separating barrier between it and one that was being worked; the men, however, escaped, but the foreman, who afterwards went down the shaft to ascertain the amount of damage, found the water up to his breast when he got into one of the chambers at the bottom. In modern salt mines there are generally two shafts, from 12 to 16 yards apart, with a pumping shaft for clearing the surface water, which only goes down as far as the latter descends. The surface work is covered over as a protection from rain and snow, and the shafts are tubed below the point where the surface water is likely to penetrate. The cast-iron tubing is similar to that used for coal mines, but instead of being cast in segments it is now cast in complete cylinders. The beds of salt varies from 15 to 18 ft. in Cheshire, and the mode of working is by driving out in the upper part between 5 and 6 ft. high, and this is called the roofing, which is followed up by what is termed the benching, so that pillars of the rock salt are left where they are considered necessary. In driving the roof some holing and cutting is done with the pick; but this is not much, as powder is usually resorted to, and then the roof is made into shape with the pick. The benching varies from 9 ft. 3 in. to 12 ft. 3 in., and is blown off by a succession of shots fired in a slanting direction from top to bottom. In one of the largest mines the number of men employed is about 80, and amongst that number about 1 cwt. of powder is used daily. In making shot holes the drills used are some 8 ft. in length, pointed at each end, and the diameter being larger in the middle no hammer is required. Whilst uncharging the shot the powdered salt made in drilling the hole is put next to the powder, and then coarser grained salt upon that; the charge is then fired by a straw filled with fine powder lighted from a candle. Unlike what is usually the case in coal and other mines, the men only retire a few yards whilst the shot goes off, for the salt does not go far away when it is brought down. Extensive pillars have to be left, and that on an extensive scale.

At the principal mine in Cheshire the pillars are in an oval form, some of them 640 yards long by 280 broad, extending over about 40 acres. The height of each pillar is about 5 yards, and of various

breadths and lengths, and are set at various distances apart. The thickness of strata they have to support from the base to the surface is more than 100 yards. At another mine where the height of the working is about 6 yards, and where the rock salt is not quite firm the pillars are 10 yards square and 25 yards apart, but there are some 12 yards square and only 18 yards apart, so as to more perfectly render the roof safe. Iron tramways are used underground for the conveyance of the rock salt, but the rails are often fixed to pegs let into drill holes in the rock salt, so that in such cases sleepers are not used. The workings are, as a rule, free from carbonic acid gas, and at only one place has fire-damp been met with, and that on only one or two occasions. The labour is by no means exhausting, and as the ventilation is always good and the air pure, to such an extent, indeed, is this the case that butchers' meat, it is said, keeps quite good underground in the warmest weather for eight or nine weeks. The bottom parts of the shaft are slightly bell-mouthed, so as to allow of the bucket ascending without catching. The ventilation, notwithstanding the smallness of the shafts and the want of ventilating powers and partitions for sending the air round the workings, is usually, excepting it may be for about two months in the hottest part of summer, when the air occasionally becomes stagnant, and this may continue until the cold weather sets in about September and October. The winding is done by ordinary steam-engines, some of them being provided with indicators to show the position of the load in the shaft, and have good brakes, which when the steam is not up for winding rock salt, are used for lowering and raising the miners by counterpoise. Flat hemp ropes are used, being preferred to iron which the salt causes to rust, and in some of the square-timbered shafts a signal wire is placed with staples in one corner of the cased part, so that the buckets which are round do not touch it, and when the shafts are circular but without metal tubing the wire is let into a groove cut in the marlstone and rock salt. But where the shafts are small and cased with metal cylinders, which have no such groove, then a signal wire is not used, as the buckets would catch it. It has, however, been found by experience that a signal wire may be dispensed with, seeing that the rock salt together with the metal tubing are good conveyors of sound, so much so that the men when shouted to from the surface to the bottom, nearly 300 yards, they can understand what is said. The deepest salt mine now being worked is stated to be the Dun-cruie, in the North of Ireland, which is 295 yards from the surface, the thickness of the rock salt being 40 ft. The pillars are 12 by 10 yards at the top widening to 14 by 12 at the bottom. As to pressure, it has been found that at 110 yards from the surface with a thickness of 22 yards of rock salt left above the pillars, a width of 25 yards has been found to stand secure, and the proportions of 10 by 10 yards equal to 1000 square yards for each pillar left in each area of 35 by 25 yards, equal to 1225 square yards, being in the proportion of one of pillar to every 12½ excavated. In the case of crushing, it generally begins by cracks or breaks at the corners of the pillars, and then cracks come on in the roof; but in this state the rock salt generally adheres together, but the roof "creeps" nearer to the floor and the parts of the shafts which are in rock salt become smaller in diameter.

The temperature of the rock salt mines is very moderate, and must be pleasant at all times to work in, so that eight hours' labour daily cannot be considered a hard task. In Cheshire the temperature, at depths between 110 and 160 yards, varies from 48° to 55° Fahr. with the dry bulb thermometer, and between 41° and 53° with the wet bulb, the hydrometrical difference between the wet and dry bulbs varying between 1° and 6°, but variations have been found with both bulbs, depending upon the part of the mine in which the observation was taken, the number of miners' lights, shots, &c. As to the actual thickness of the rock salt, in some places in Cheshire it is said to be nearly 30 yards thick in the top bed and the same in the bottom one; but at Marston and Wincham it is about 30 yards, whilst further south the top bed decreases 5 yards in a quarter of a mile, and at the most southerly pits the top bed is only 16 yards in thickness. But the total thickness of all the beds and lumps is estimated at about 180 ft. At the present time work is going on much as usual; but no one can say how long this will be the case, for the subsidence going on not only threatens the immediate locality of the mines, but the town of Northwich as well, whilst the greatest anxiety is felt by the inhabitants both in the town and district, seeing that the locality is completely honeycombed by abandoned salt mines, whilst the subsidence has been such that houses and buildings and chimney stacks that once were connected with the salt works have disappeared, or merely show what were once their lofty summits.

## OUR RAILS ABROAD.

The external demand for our rails appears to have somewhat fallen off in May; but still it was better maintained than might, perhaps, have been expected under all the circumstances. Our exports of steel rails experienced, indeed, some increase last month; but this augmentation was more than neutralised by the large falling off observable in the shipments of steel rails. The American demand for our rails is falling off, but still it has not by any means ceased at present. The quantity of iron rails forwarded to the United States in May was 2140 tons, as compared with 17,206 tons in May, 1881, and 6305 tons in May, 1880; while, for the five months ending with May 31, this year, the aggregate shipments were 20,567 tons, against 51,469 tons in the corresponding period of 1881, and 45,099 tons in the corresponding period of 1880. The exports of our steel rails to the United States in May stood at 9517 tons, as compared with 22,638 tons in May, 1881, and 22,968 tons in May, 1880; while the aggregate shipments for the five months ending with May, 1881, were 80,011 tons, as compared with 71,664 tons in the corresponding period of 1881, and 47,565 tons in the corresponding period of 1880. It follows that the aggregate shipments of iron and steel from this country to the United States in the first five months of this year stood at 100,578 tons, as compared with 126,133 tons in the corresponding period of 1881, and 92,664 tons in the corresponding period of 1880. This year's figures compare, upon the whole, favourably with those of the two preceding years, but it seems probable that a rather marked falling off will be witnessed in the demand as the year further develops itself. It is satisfactory, however, to find that the colonial demand for our rails is increasing. This is especially true of British India, to which much larger deliveries of steel rails have been made of late.

The annexed table shows the shipments of iron rails to British America, British India, and Australasia in the first five months of this year, as compared with the corresponding periods of 1881 and 1880:—

	1882.	1881.	1880.
British America .....	217	25	242
British India.....	3,594	1,788	2,477
Australasia.....	1,723	736	2,135
Total .....	5,534	2,549	4,854

A similar table with reference to our exports of steel rails to the same group of colonies exhibits the annexed results:—

	1882.	1881.	1880.
British America .....	16,399	22,491	16,804
British India.....	46,861	14,828	43,856
Australasia.....	28,388	32,659	23,351
Total .....	91,648	69,988	84,011

It follows that what we may term the colonial demand for our iron and steel rails has moved on as follows this year, as compared with the corresponding periods of 1881 and 1880:—

	1882.	1881.	1880.
British America .....	16,616	22,516	17,046
British India.....	50,455	16,616	46,333
Australasia .....	30,111	33,495	25,486
Total .....	97,182	72,627	88,865

We can but express satisfaction at this result, because it has long been our opinion that it is in the colonial demand that our ironmasters can alone expect to find a satisfactory compensation for what appears to be an inevitable falling off in the American demand. It may perhaps be interesting to note the course of the colonial demand

for our steel rails in May this year, as compared with May, 1881 and 1880:—

	1882.	1881.	1880.
British America .....	12,111	17,642	5,125
British India.....	12,580	1,379	3,102
Australasia .....	2,615	5,643	6,640
Total .....	27,306	24,664	14,867

It will be seen that the demand was considerable, especially as regards British India. Had it not been for the British Indian demand the figures representing our steel rail exports for the whole of May would have shown a decline as compared with the corresponding total for May, 1881. The exports of steel rails to Brazil in May amounted to 4103 tons, as compared with 2082 tons in May, 1881, and 1374 tons in May, 1880. No steel rails appear, however, to have been forwarded to Chili or Peru last month. Upon the whole, we may regard the results indicated by our rail exports in May, and in the first five months of this year, as quite as satisfactory as could have been anticipated. The aggregate shipments of our iron and steel rails in all directions to May 31 this year amounted to 320,152 tons, against 258,033 tons in the corresponding period of 1881, and 225,341 tons in the corresponding period of 1880. The exports have thus made a good start this year, but we should not be surprised if the increase indicated thus far is found to have given place to a decline when the statistics for the whole of 1882 become available.

**EMPLOYERS' LIABILITY AND WORKMEN'S WIDOWS.**—A case which raises a question of the utmost importance—Griffiths v. the Earl of Dudley—was before Mr. Justice Field and Mr. Justice Cave in the Queen's Bench Division of the High Court of Justice on Wednesday. The question was whether a workman can, contracting himself out of the Act, also contract his widow out of it in case he is killed by any accident in his employment. The question had arisen in the collieries of the Earl of Dudley, which are very extensive, and in which there are some thousands of men employed. Under the Act there is a kind of club, for the purpose of paying compensation to members in the event of their being disabled by sickness or injury and to their widows and children in the event of death caused by accident in the course of employment. To this club Lord Dudley contributes a sum equal to the amount subscribed, and which, it is understood, is very large. Just before the Act came into operation there was a meeting of the men, who agreed to accept the conditions of employment offered to them by the Earl, among which was an express stipulation that neither the workmen nor their representatives should avail themselves of the provisions of the Act by actions against him for compensation; and there was also evidence that these conditions were posted up in conspicuous positions in the collieries. One of the men had lost his life in a colliery accident, and his widow sued for compensation. The conditions of employment were set up as excluding her claim. The County Court Judge held her claim so excluded, and this was an appeal from his decision. The case of the widow in support of the appeal was argued by Mr. Jelf, Q.C., whilst the Earl was represented by Mr. T. Reid. The Court suggested that as the Act did away with the "common employment" doctrine, and declared that the workman should be in the same position as if there were no such "common employment," the doctrine relieving the employer from liability in such cases would have no application; but eventually, at the end of the day, the case was adjourned, on account of the importance of the question, in order to afford the counsel for the Earl an opportunity of meeting that view of the case.

**PORT OF SWANSEA.**—At the monthly meeting of the trustees of the Harbour of Swansea, held on Monday, the Chairman, Mr. F. A. Yeo, made the welcome announcement that the final certificate of Mr. Abernethy, C.E., as to the Prince of Wales' Deep Water Docks had been received, and would be open for work after that day. This, unquestionably, will give a much needed impetus to the coal trade and the staple industries of the western part of the Principality, opening up important mineral districts to better outlets, and enabling far heavier tonnaged vessels and steamers to visit the port than could do so before. The docks, which were formally opened by the Prince and Princess of Wales in October last, are of 23 acres in extent, and at once doubles the dock area of the port. They have a uniform depth of water of 26 ft. at ordinary spring tides, have been connected by rails with the various coal fields in the locality, have a large number of coal drops for the loading of vessels, and these drops, and the opening and shutting of the gates, are all worked by hydraulic machinery erected by Sir William Armstrong and Co. The total cost of the docks, &c., is about 300,000l., the contract of Mr. T. A. Walker, of 110, Cannon-street, London, for the construction of the docks pure and simple being 197,000l., and the entire work has been completed within three years. To show the commercial importance attached to these new docks, we may state that the Great Western Railway Company have already taken wharfage frontage to the extent of 4500l. per annum; the Corporation of Swansea 3000l. per annum, and the Midland Railway 2500l. The adjacent coal district will naturally receive a great impetus from this dock opening, and with the early completion of the direct railway connection with the great Rhondda coal basin it may be said that the port and the whole western district have entered upon a new epoch in their commercial history and development.

**LEAD POISONING.**—Two deaths have lately taken place in the North of England from lead poisoning, notwithstanding the fact that the best known safeguards for securing the health of the workpeople had been taken by the owners of the works, leads to the question whether there are any antidotes for preventing lead from seriously affecting the health of those engaged in its manipulation. At Hebburn, on the Tyne, there are extensive works where the desilvering of lead is carried on by Pattinson's beautiful process, and where white lead is made on an extensive scale. In the latter branch in particular a good many females are employed, some of them in putting the lead through the rolls; but with respect to all of them most stringent regulations are laid down, so as to prevent the lead affecting them in any way. There are baths and lavatories which the females are obliged to avail themselves of at certain times, for it is considered that the hands should be frequently and thoroughly cleansed several times a day, and that all should bathe at least once a week. In addition to these necessary appliances, provision is made for a supply daily to all hands of milk, beer, and acidulated drinks used for the purpose of washing out the mouth, and counteracting the deleterious effects of the lead, whilst respirators were also provided. But the rules made in the interests of the women were frequently evaded by many of them, especially as to the bathings, although persons were specially appointed to see that the rules were fully carried out. Yet it is stated, on high medical authority, that were the rules fully adopted, such as we have described, there would be very few what are termed "lead cases." In almost every branch connected with the working of lead, those engaged are subject to certain diseases, which turn out more or less fatal to those who are attacked. Still it has been shown that, even by dietary, the ordinary effect of lead can be counteracted, although there are some persons who are susceptible to the effects of lead more than others are, and who, under almost any circumstances, in the long run will succumb to its poisoning powers, more especially if they are attacked after they have been but a comparatively short time at the work. Where, however, persons have been constantly at work for some years, and have not suffered from the lead, it may be fairly assumed that they have become somewhat impervious to its deadly effects. As to the antidotes, we are told that at our large works, where both Englishmen and Scotchmen were employed, the former, who lived a good deal on fat meat and fatty matters, were much less susceptible to the effects of lead than those whose dietary was largely composed of oatmeal. At some of the works on the Continent where the lead workers were at one time subject to palsy, colic, pains in the bones, and ending with convulsions, the usual attributes of lead poisoning, these soon gave way when the employees began to feed largely on fat meats, especially before going to work in the morning. At one place where a great deal of lead work was done, and where at one time there were the usual attacks a change was made in the dietary, and cheese

shaft at which the apparatus is fitted up is 256 yards deep, and the time of running is 35 seconds. The apparatus is the first of its kind, and we believe the arrangement has been modified by placing the driving pulley and engine directly over the pit and providing against the breakage of the rope by two parallel side ropes running over loose pulleys, which, in the event of the main or driving rope failing, sustain the cages. By the Koepe system, at the beginning of the left the weight of the rope attached to the loaded cage is added to that of the coal, and at the point where the cages meet the two ropes balance one another, and in the second half of the lift the rope attached to the empty cage lends its weight towards raising the coal. The power given out by the engine may be made variable with the load and the leverage of the rope due to the radius of the drum may be varied by means conical drums or by pulleys, in which the spirals cover one another. The system, it appears as yet, has only been tested at one colliery in this country, but it has been found successful, and the introduction of it in the district in which the Avon Colliery is situate is sure to excite a good deal of interest. The winding-engine is now being made at the works of Messrs. Nasmith, Wilson, and Co., Patricroft, near Manchester, and have 30-inch cylinders, with a 5 ft. 6 in. stroke, and the weight of coal per lift without the cages will be 50 cwt., which is a good deal more than there is usually raised at on cdraw.

At Dutoitspan the Britannia's return of 8s. per 10l. share is only a preliminary for larger dividends, which we are advised may be looked

**BALANCE WINDING ROPES AND ENGINES.**—As we stated not so long since our mining engineers may now and then receive an idea worth working out by noticing what is being done at some of the mines on the Continent, and of this we have an illustration in the fact that the Koepe winding system is now being adopted at the Avon Colliery, belonging to the Great Western Railway Company. Herr Koepe is the engineer to the Messrs. Krupp and Co., the makers of the well-known Krupp guns, and at the Hanover Pit, belonging to the firm, which is situate in Westphalia; he has introduced a new kind of winding engine and counterbalance, and which deservedly is worthy of special notice. Instead of being provided with a drum the shaft of the engine simply bears a large pulley 24 ft. in diameter, having a wooden rim with a deep groove in it around the periphery, and lying in the groove is a steel rope  $1\frac{1}{2}$  in. in diameter, the two ends of which pass over the pit head-gear, and, hanging down the shaft, suspend the cages. Below there is a similar rope, one end of which is attached to the bottom of each cage, whilst the rope itself simply hangs freely down the shaft in a great loop, which reaches about 6 ft. in the sump. This is the counterbalance. The apparatus virtually forms an endless rope interrupted only by the cages, and as the upper loop passes over the head-gear and round the driving pulley, its lower loop hangs perfectly loose in the shaft, so that the whole remains in perfect equilibrium in any position. The engine driving the large pulley alternately in each direction raises and lowers the cage. The

Compared with the supply of gas or of water the first cost of the machinery, plant, and service appliances for electric supply is infinitesimal, and if the introduction of the worn out principle of protection be avoided by ignoring monopolies it would be to the advantage of all concerned. From the very nature of electricity and character of electrical supply centralisation is unnecessary and useless, for experience has taught electricians that if electric illumina-

tion, electric power supply, and other applications of electricity are ever to become general it will be by taking the means of generating the current to the door of the user, unless in the exceptional case of the near proximity of a river or torrent rendering it possible to generate the current for almost nothing. It must not be forgotten that in using electricity for the production of power we are using force second hand, and that it is to some extent worn out before we get it.

**FRENCH DATE COFFEE.**—The manager's report states that his sales to June 9 more than equal those previously recorded, and that in addition a considerable profit will shortly be realised from another source. He concludes:—I have some other large orders which will mature in a few days. We have something more than turned the corner now, and, by maintaining the same quality, I am sure we shall do an average trade of 1000 kilos. per day easily.

### Original Correspondence.

#### CANADIAN RAILWAY SECURITIES.

SIR,—Since the recent improvement in the quotations for the various stocks of the Grand Trunk and Great Western Railways of Canada, a large number of letters have been daily addressed to me enquiring my views as to the probable continuance of the rise in value, and as I find it almost impossible to fully reply to these communications, I shall be greatly obliged by your affording me space to explain my reasons for believing that a further steady advance is likely to be realised.

In the first place I think one of the most important facts to remember is that, notwithstanding the present improved quotations for the various stocks, they are still considerably lower than they were on this day last year; thus:—

Grand Trunk 1st Pref. were then 106½, they are now 103½	
Do. 2nd do. 98, do. 88	
Do. 3rd do. 54, do. 44	
Do. Ordinary do. 26½, do. 19½	
Do. New Ordinary do. 3 pm. 5½ dis. 14½	
Great Western of Canada Ord. do. 16½, do. 14½	

My reasons for now confidently anticipating a further steady and continuous rise in quotations may be briefly stated in one sentence—viz., that by contrast with this time last year the prospects of the Grand Trunk and Great Western Companies are in every respect of a distinctly more favourable character, and yet the stocks of both railways are very much lower in price. In comparing the position as in June 1, 1881, and at the present time it will be seen—

1. That whereas last year these two leading Canadian lines were working in opposition to each other, they are now about to be united in such a way as will effect a net annual saving of 200,000l. to the joint undertakings. The meetings of both companies have been called for the 29th inst., when the details of the proposed agreements between the two companies will be discussed, and full particulars afforded as to the future working of the railways, and how the savings of 200,000l. per annum are to be secured.
2. In June, 1881, all the indications as to the harvest prospects on the American continent were most unfavourable, and events subsequently proved the correctness of the estimates which were then formed. This year there is promise of abundant and excellent crops, both in Canada and the United States, so that there is no need for apprehension as to the grain traffic falling off; but on the contrary, through the deficiencies of last year considerable increases may be reasonably expected in the coming autumn.
3. In consequence of the bad harvests last year, and the natural contraction of grain traffic on the railways, the "war rates" took place. Now, however, the "Pool Committee" has been re-established on a more permanent and solid basis than at any previous time, and whereas in June and July last year "cutting of rates" prevailed to a terrible extent, an official notification has recently been made that an increase in the West-bound freight rates is to take place on the 1st proximo. Thus, on the very day that the two great Canadian railways become united they will derive additional advantage from increased rates on their West-bound freight, in marked contrast to last year, when they were in open antagonism, and suffering severely from greatly reduced tariffs.
4. Last year the securities of these two railways were most popular with investors, and they attained to the high prices above mentioned in consequence of the great improvement in the traffics, their weekly totals being then considered exceptionally good. Although during the first four months of this year there have been decreases in the earnings consequent upon the low rates, they have lately shown much improvement, and for some weeks past increases have again been secured in advance of the high traffics for the corresponding period of 1881.
5. Throughout the whole of the second half of 1881, consequent upon the war of rates and deficient harvests, there were heavy decreases in the traffics almost every week. With both these disturbing causes now removed the prospects for the six months ending December next are decidedly hopeful, and I have not the least doubt weekly increases will be regularly earned.
6. The immigration into Canada is proceeding this year at a rate beyond all precedent, and, apart from the immediate advantage derived from this source of traffic, the settlement of so many thousands of families in the North-Western Provinces of Canada must not only tend to the permanent enrichment of the Dominion, but also create a steady stream of traffic for the leading railways;
- and 7. The development of the Chicago Extension of the Grand Trunk Company is very remarkable, as is evidenced by the great growth in the weekly receipts. As the Grand Trunk Company own nearly the whole of the ordinary stock of this line (about a million and a quarter sterling), there is a valuable reversion to the united undertakings in the rapidly improving assets.

With reference to the approaching meetings of the Grand Trunk and Great Western Companies, shareholders in both undertakings will be pleased to learn that the negotiations between the two boards have proceeded most satisfactorily; and, despite the warnings of opponents to fusion that "it couldn't be done," and the rumours of "difficulties in the way," and "slight hitches having intervened," &c., there is not the least doubt that the agreements to be submitted on the 29th inst., will be unanimously ratified in both instances. A new era of prosperity for these two great railways will date from July 1, when they first work together in harmony instead of bitter opposition.

From the above recital it will be seen that abundant reasons exist for the belief that the various issues of Grand Trunk and Great Western of Canada securities must rise in value. Confident in this opinion myself, I have no hesitation in advising proprietors to hold on firmly to their stocks, and to those who are contemplating further purchases, not to delay, but to buy now, before any further advance takes place.

The bonds, debentures, and first preference stocks of both railways must be regarded as high-class investments, but it is in the other issues I look for the most marked improvement. It will be observed by the prices quoted above that a considerable margin for a rise exists before last year's prices are even approximated; Trunk Securities being 10 per cent., the Third Preference 10 per cent., and Ordinary 6½ per cent. lower than then. Great Western of Canada are no less than 3½, 2s. 6d. per share, or 10½ per cent. lower, though they will henceforth be entitled to a 3 per cent. guaranteed dividend under the union with the Trunk Company, and they enjoy

besides a valuable reversion in their right to share in the proportion of 30 per cent. of the total net earnings of the two companies, after payment of their 3 per cent. guarantee. The value of this reversion is variously estimated at from 4l. to 5l. 10s. per share, so that regarding the 3 per cent. guarantee as being worth—say 13l. for the share of 20l. 10s.—Great Western of Canada shares should now be quoted from 17l. to 18l. 10s.

WILLIAM ABBOTT.  
16, Tokenhouse-yard, E.C., June 16, 1882.

#### SENTEIN (SILVER-LEAD AND BLENDE) MINING COMPANY.

SIR,—The cloud of mystery which hung over this property has now been dispelled; the silver lining has made its appearance. When Messrs. John Taylor and Sons took over the control, a little more than a year ago, the true position of the company's affairs became known. The company was in great financial difficulties, which appeared insurmountable, owing to mismanagement at the mine. It would appear that the promoters were too anxious to get the mine on the Dividend List, and in the first balance-sheet a profit was shown, and taking credit for a larger sum for ore in stock than, perhaps, should have been done, a dividend of 10 per cent. was paid in January, 1880. The announcement of this dividend no doubt caused an enquiry to spring up for the shares, which at one time changed hands at 200 per cent. premium. Subsequently the true state of affairs gradually oozed out; this dividend should not have been declared, the company could not afford it, as many thousands of pounds were required to defray the expenses of the construction of the wire-rope tramway, the new dressing machinery, and other works. The remainder of the unissued shares were offered to the shareholders, and all taken up, but that did not suffice. In May, 1881, an appeal was made to the shareholders for fresh capital, which was not responded to, but confidence in the mineral resources of the property was unshaken.

Messrs. J. Taylor and Sons having had special means of ascertaining that fact, they were indefatigable in their efforts to keep the works going. Some of the directors advanced moneys out of their own purse for the purpose, and the large stocks of lead and blende had to be disposed of at a great sacrifice, and what has been the result? During nine months of their management up to December 31 last, notwithstanding all the difficulties they had to contend with, they were enabled to render a good account of their stewardship by showing a profit on the working of the mine of between 1500l. and 1600l., which was only a period of proper organisation, development, and of completing a great quantity of dead work. Since this result has been achieved they have succeeded in raising upwards of 2000l. by the issue of preference shares, which has enabled the company to pay off its pressing liabilities, and has been its salvation. Operations have been carried on most successfully during the last five months. A large amount of work has been done, levels and cross-cuts have been driven and the lodes intersected, winzes sunk, fresh discoveries made, new stopes opened out, and still erected for the easy extraction of the ores, the benefits of which will in future show itself in the shape of increased monthly returns and profits. The produce for last month amounted to 104 tons of marketable, nearly all first class silver-lead, and 210 tons of first-class blende, and the yield for this month, it is thought, will considerably exceed this on account of the great improvement in the quality of the ores, of which the manager calculates on the significant output of 1300 tons for the current month. It must be remembered that the interest on the preference shares will only absorb upwards of 200l. yearly out of the profits now being made, so that the dividend on the original shares will be but slightly affected by this.

The mine is now about to resume its pristine splendour, as when operations were suspended at the time of the Franco-German war owing to the general pressing into the army it gave employment to 400 men, and was returning 300 tons of silver-lead monthly. One eminent mining expert some time ago stated, "With regard to the Sentein Mine it is a gigantic one; it will in all probability last longer than any living man." The results now being realised fully justify the expectation that this statement will prove correct. This is the first English mining enterprise in the Pyrenees since that chain of mountains has become accessible by railways, and its success having been ensured by the science, skill, and application of English capital it will naturally have the effect of establishing mining here as a most lucrative branch of industry, and cause fresh capital to be attracted, which will tend to stimulate the prosperity of the Pyrenean department and help further to foster the good feeling now so freely reciprocated between us. As lead is going up in price and likely to have a most substantial rise when the operation of the Spanish-French Treaty comes into force; it will therefore have a most favourable effect on the prospects of the Sentein Mine, containing, as it does, all the necessary conditions to culminate in a great and lasting success. Without the necessary conditions of success no enterprise could possibly flourish, and even under these favoured circumstances success would depend on good management, and the shareholders ought to rejoice that their property is not overweighted with a heavy capital.—City, June 16.

H. J. S.

#### GOLD MINING IN NORTH CAROLINA—TREATMENT OF SULPHURETS.

SIR,—The treatment of sulphurets or iron pyrites containing gold seems to be exercising the minds of many investors in Indian gold mines and elsewhere. It may be of interest to some of your readers if I relate as briefly as possible what I saw regarding the treatment of sulphurets in North Carolina. A few months ago I was sent out by a syndicate of gentlemen to inspect and report on a gold-bearing property in that state. There were several true fissure veins of quartz mixed with iron pyrites on the property, running north-east and south-west with a dip of 70 to the north, average working thickness of veins about 15 inches. There was no difficulty in tracing the course of the veins as the ground is covered with old surface workings for free gold; in all cases the free gold disappears when water is reached at a depth of 30 feet. The ore I saw worked was got from a depth of 180 feet, quartz mixed with iron pyrites, a small percentage of copper, and not a trace of free gold; yielding by assay a little under 1 oz. of gold per ton. The owners, practical men, knowing by experience how useless it was to try and get the gold by amalgamation, did not try "doctors," patent amalgams, or any other means so successfully used to wreck gold companies, but adopted the Mears' chlorination process, which, whatever its defects, had the merit of getting all the gold out of the ore. The ore was mined, run down by gravity to the mill, passed through a crusher, and fed into the stamps, passing through a sieve of 40 holes to the inch, on to wooden tables, where some of the earthy matter was got rid of, leaving the sulphurets deposited at the bottom of a series of boxes.

In roasting the pulp, as the ore is called when it comes from the stamps, was loaded in trucks, run down to the roasting-house, dumped into the flue of the furnace, and through openings on each side spread out to dry by a man with a rubble. As the ore dries it is pushed on to a revolving hearth, which holds a ton of ore, and constantly kept turned over. The roasting takes from six to eight hours, and about ½ cord of wood is used per ton of ore. The sulphur and other volatile matters are thus driven off, the gold remaining in the form of a metallic dust, and free gold can be seen by panning. The ore, which has lost about 7 per cent. in weight by roasting, is spread out on the cooling floor for chlorination. From the cooling floor the roasted ore is elevated into a truck, capacity 1 ton, on to the second floor of the building, weighed and dumped into an iron revolving cylinder of a similar capacity, which is lined with lead, into which 140 gallons of water are put, also 40 lbs. of chloride of lime. The cylinder is then rotated for a few minutes to mix the lime and roasted ore; 3½ gallons of sulphuric acid is poured into the cylinder, the top firmly screwed down, and the cylinder revolved for one hour. The chlorine gas showed a pressure of 20 to 25 lbs. to the square inch. If much copper is present in the ore a larger proportion of lime and acid are necessary. All the gold contained in the ore is dissolved, forming a solution of terchloride of gold.

The excess of gas is passed into the next cylinder or drawn off into the flue, and the contents of the cylinder discharged into a leaching vat or filter. The filters are flat wooden vessels lined with

lead 8 ft. by 6 ft. by 18 in. deep; the bottom covered with perforated tiles. On top of the tiles is a layer of crushed quartz about the size of a pea, and on top of the quartz 3 in. of sand, protected on top by strips of wood. The contents of the cylinder is distributed evenly over the strips of wood, and the solution of chloride of gold is run off into wooden vats lined with lead, holding 700 gallons. The precipitate used is sulphate of iron, made of scrap iron and sulphuric acid and water, one part of the former to eight of the latter, and warmed by steam. The solution of sulphate of iron in the proportion of 6 gallons to 500 gallons of terchloride of gold is put in, well stirred, and the whole allowed to settle for 70 hours. The gold is precipitated in the form of a brown powder, and the liquid drawn off with a syphon. The brown precipitate, which is gold in a fine state of division, is treated with muriatic acid, well washed and filtered, then smelted in a crucible with some borax and nitre. The gold produced was 985 fine.

Numerous careful assays that I saw made from the roasted ore gave 19 dwts. 12 grs. of gold per ton. Actual yield per ton of ore by the process was 18 dwts. 12 grs., or assay in excess of yield 1 dwt. An approximate estimate of cost of working, 1 ton of ore; mining and milling, 17. 10s.; roasting, 15s.; chlorination, 12s. = 27. 17s.; whilst the value of 18 dwts. of gold is 37. 12s., which leaves an apparent profit of 15s. per ton. My conclusions were if that particular ore yielded a steady average of over 1 oz. of gold to the ton there was no reason why a good profit covering all contingencies should not be made in working the property. The process is, as everyone knows, only an improvement on that of Plattner, which has been in use for upwards of 30 years. As regards smelting for extracting the gold, the lowest price charged is 10l. per ton in New Jersey, and the freight, in addition, comes to 2l. per ton. The remains of several smelting works which I saw were the best proof that utter failure would ensue if that method were tried although surrounded by gold-bearing properties, for the reason that there were no bye products available to use in smelting.

Walton-street, June 16.

J. S. TROTTER.

**THE BESSEMER STEEL INDUSTRY IN AMERICA.**—In a speech recently made in the United States House of Representatives by the Hon. Abram S. Hewitt, one of the members for New York, some interesting details were given with regard to the profits and condition of the Bessemer steel industry across the Atlantic since 1873. The figures given are taken from the accounts of the Pennsylvania Steel Company. It will be remembered that a disastrous commercial crisis occurred in America, which depressed for a long time the industries of the country. Yet in 1874 the total amount of the dividends paid by this company was 8 per cent. During this very year, however, the representatives of the steel industry reported to the House Committee on Ways and Means that their business was in a very unsatisfactory, if not in a disastrous, condition. In 1875 the dividends were 9 per cent.; in 1876, 6 per cent.; in 1877, 6 per cent.; in 1878, 3½ per cent.; in 1879, 9 per cent.; in 1880, 12 per cent.; and in 1881, 22 per cent. At the close of the latter year, however, the company, whose capital was only 400,000l., found itself with a reserve fund, accumulated since 1878, of not less than 657,284l., although dividends amounting to 43 per cent. had been paid to the shareholders within the last three years. Now, according to the laws of Pennsylvania a State tax is charged upon all sums received by shareholders out of revenue, and the managers of the company, wishing to distribute a portion of their huge surplus without payment of the tax, devised an ingenious plan for the accomplishment of their object. They bought, in the first place, 5000 shares in their own company for 265,000l., being at the rate of 53l. per share, and distributed them to the shareholders at the price of 20l. per share, thus making a present to the latter of 165,000l. Thus there remains still of profits earned since 1878 a sum of 492,284l., exceeding considerably the capital stock of the company.

**ELECTRIC LIGHTING.**—So many British capitalists are at present interested in the question of electric lighting that Mr. Robert Routledge's excellent translation of Count du Moncel's *L'Eclairage Electrique* will be generally acceptable. Although the *Library of Marvels*, in which the original appeared, is essentially a popular series, Count du Moncel's work is strictly scientific, both in arrangement and in treatment, and the general reader will probably acquire a better notion of the details of electric lighting from this cheap little volume (London: George Routledge and Sons, Broadway, Ludgate Hill) than from many of far greater pretensions. A brief historical sketch is followed by definitions of the electric current, electro-motive force, tension, potential intensity, resistance, conductivity, electrodes, and polarisation. There is a good general account of electric units, and descriptions of the electric light and the voltaic arc. The second part of the book describes the numerous generators of the electric light, from the simple Grove's and Bunsen's batteries to the most recent forms of Gramme's, Brush's and Lontin's machines. In the third part of the volume he treats the various kinds of arc, and incandescent lamps, and of electric candles; and a section is then devoted to the question of the cost of electric lighting with batteries and with induction machines. The fifth part treats of the application of the electric light, whilst the concluding part gives a review of the statements contained in the previous parts of the book. The notes and appendices are scarcely less valuable than the body of the work, embracing as they do notes on the inductive actions of the new dynamo-electric machines according to the resistance of the external circuit, the criteria of the electric light, on a new arrangement of the Werdermann lamp, and on Edison's new discovery. The translator's appendices include a table of English equivalents for French denominations, and an account of the more recent incandescent lamps—Swan's, Maxim's, Edison's, and Fox-Lane's; and the Faure secondary battery. The volume is interesting throughout.

**MINING INSTITUTE OF SCOTLAND.**—At the monthly meeting of members (Mr. J. M. Ronaldson, vice-president, in the chair), Messrs. Barrowman and Hastie gave in the report of the deputation to Shipley Colliery, Derby, to examine Messrs. Smith and Moore's new patent method of getting coal, which was described as consisting in putting lime into a hole and slacking it there in a confined state, the steam given off and swelling of the lime exercising the force which it is claimed brings down the coal. After discussion it was agreed, with the view of trying the method in the stoop-and-room and other systems of working in this district to intimate to the patentees that every facility would be afforded them for doing so. It was agreed to hold the summer meeting of the Institute at Stirling in July next.

**ORGANOS GOLD.**—The reports of the manager, Mr. J. G. Green, indicate that this property is rich for gold, as, indeed, the assays prove. The property is extensive, comprising about 1500 acres, well wooded and watered. The machinery is expected to be up and in working order in July, and a remittance of gold in August. The various assays from Constanza lode give 6 ozs., 9 ozs., and 10 ozs. odd, and some extraordinarily rich pieces of gossan, 91 ozs., and even 544 ozs. of gold per ton. The Te Enconre lode gives 2 to 14½ ozs. of gold per ton. The gold is largely visible, and had the machinery been erected solid returns would probably have been in this country three months ago: 50 tons of quartz per day for 300 days in the year, gives 15,000 tons and ¾ of an oz. of gold per ton, gives 11,250 ozs. of gold, at 3l. 17s. per oz., 43,312l., less royalty and cost of working, say, 21,187l., leaving 22,125l. yearly profit, or 150 per cent. profit on capital. This is the lowest calculation of profit made, ¾ oz. of gold per ton. A demand is reported to have set in for the shares this week, and that they are now scarce. If the correspondent adds, any of the gold mines started within the past eighteen months or so are worth speculating in, Organos stand first upon the list, because the gold is there, they have no free shares, and nothing paid to vendors or promoters, and only 15,000 shares.

**RAISING STAMP-HEADS.**—It is proposed by Mr. S. JELLYMAN, of Canada, to employ an iron or steel band passing over a pulley, which band is operated upon by means of a small roller attached to the main shaft, upon which the pulley is hung by side straps connected by two metal straps with a forked lengthening screw, thus ensuring

a direct pull from the main shaft upon the operating roller; he carries this roller upon an eccentric shaft which is operated on by levers; he also employs a catch to hold up the stamp or drop hammer. This catch consists of a bar of metal suspended at one end, and having cut through it an oblong slot; this bar hangs in a slightly inclined plane horizontally, and through the slot passes the band to which the stamp or drop-head is attached. Small steel pawls may be fixed in one or both ends of the slot to ensure a firmer grip.

#### IMPROVED ROLLING MILLS.

Instead of or in addition to the hexagon preparatory rolls described in connection with their invention of 1880, Messrs. SCHMINT BROTHERS, of Schwelm, now propose to employ octagon and oval rolls also. For making other than the usual sections a peculiar roll arrangement is proposed. The production of the small rolls necessary in the process has also offered difficulties, in so far that such rolls made of best steel break in a short time: In order then to produce lasting rolls of a small diameter, it is now proposed to employ a material, such as wrought-iron, mild steel, or Bessemer steel; these rolls are hardened on the surface in any known suitable manner, so that the interior remains soft or of a fibrous texture. Only by using such rolls good results have been obtained, and their application is hence of material importance. For the first rolls for a triangular section with hollow sides the grooves are so arranged that a wedge shape is produced, the edge of which is half in one roll and half in the other roll. The grooves in the next rolls are such that a shorter thicker wedge section is produced, the edge of which enters one roll while the opposite thick and convex end or face of the wire enters the other roll. The finishing rolls have similarly a triangular groove into one roll, the two sides of the groove being convex, while the other roll is formed with corresponding convex rings for producing the third concave side of the wire, and has also a small half wound groove between each two rings, and into which grooves the pointed ring parts of the other roll enter.

For rolling four-cornered wire with concave sides the rolls are formed with like grooves, and, of course, with a suitable number. On the bed plate carrying the rolling mill framing are placed plunger blocks, which can be adjusted and fixed in height; these receive a short driving shaft with a strap pulley on each end, one of which by clutch drives the lower roll and the other similarly the upper roll. The pulleys are driven by open and by crossed strap (or rope, or other suitable means) from a shaft placed over head. The entering guide is placed immediately in front of the rolls; it consists, firstly, of a pair of rolls mounted on vertical spindles; and next, of a pair of rolls on horizontal spindles; in front of the former guide rolls there is a guide tube, and between the latter guide rolls and the rolling mills there is also a guide tube. The guide rolls have grooves corresponding with the grooves in the rolling rolls: they are also arranged so that their axes may be shifted closer to or further apart, as it is necessary to shift them apart to enter the wire; for this purpose one roll in each pair is mounted in an eccentric bearing, which can be turned round by two levers fixed thereon, one lever for the upper roll guided in a slanting slot in a plate or rod that can be shifted up or down by a cord passing over pulleys, and which has a weight attached below, the other lever being by a rod connected to a block which is also guided in the slanting slot. The weight tends to draw the guide rolls together.

Upon leaving the mill the rolled wire is by means of a tube guided to a coiling appliance or winch. The drum of same is conical, and is placed horizontally or vertically, and has at one end slanting blades or paddles, which serve to take hold of and grip the wire. The tube is curved in front of the drum guiding the wire to the thicker end of the drum; it is first taken hold of by the blades, and as the drum turns it is carried along therewith. The end of the tube is thereby made to follow a curved slot, and when half way release a catch, so that a lever which is weighted carries the guide tube along in the horizontal part of the curve until it drops into a notch therein. The lever is held in position by a peg which rests on the bellcrank shaped catch, and this latter is held by a stop. When the guide tube moves further the catch will by means of a peg release the aforesaid peg, and thus release the lever; this latter will then drop on to the guide tube, and because of its weight force the tube to continue to move further in the curved slot until it drops into a notch, so that it is held therein or cannot move back. The drum is worked by a cone step pulley and friction clutch, in order to equalise the speed differences between the winch and the rolling mill. The drum is fixed on the shaft and the step pulley is loose thereon and is connected to a suitable striking gear. The shaft bearings are, of course, fastened to a substantial frame.

#### PNEUMATIC ORE DRESSING.

Some improvement upon the pneumatic machinery for the separation of minerals patented by him in 1879 have recently been added by Mr. B. W. HART, of Kildare-terrace. It will be recollected that his original machine is constructed with a peculiarly shaped box, which is widest at its rear or hopper end, its sides extending from this rear end parallel to each other for a short distance, and then converging to the front of the box which is comparatively narrow. The said box is provided with a sieve bed which forms an inclined plane from the back to the front of the box. The admission of air to the space below the sieve bed is effected and controlled by the aid of suitable valves which act to produce the puffs of air required for jiggling the material on the sieve bed. In the modified arrangement, the box, instead of being open at the top, the said box is closed by a cover of suitable thickness provided with apertures at the sides for the escape of the lighter portions of the ore or other material, and there is an aperture at the lower or small end of the said box for the discharge of the dense or heavy portions from the sieve bed. By thus covering the box or bed the air forced through the sieve bed or bottom is to a certain extent confined, so that its pressure is exerted more advantageously than heretofore in separating the ores or other materials on the sieve beds according to their specific gravity.

It is proposed further to modify the apparatus by diminishing the space below the sieve bed. For this purpose he constructs the portion of the box below the sieve bed with only a narrow passage or space for the air immediately under the bed, and extending from the hopper end to the discharge end of the box. He can accomplish this result by placing in the central portion of the part below the sieve bed a block of wood or other suitable material, of such dimensions as to fill the said space with the exception of the aforesaid narrow air passage; and he prefers also to form an air channel from the rear to the front of the box below the said block. According to another part of the invention the central portion of this block is raised by a platform or cushion placed thereon to the level of the sieve bed, thus dividing into two parts the passage or space for the air between the sieve bed and the block. The cover of the box is supported on the raised platform or cushion. The under part of the cover is made hollow on each side, forming two troughs convergent at the lower or discharge end of the box. Another part of the invention consists in the division of the said troughs transversely into a series of covered cells or compartments provided with apertures at the outer sides for the escape of the lighter portions of the ore or other material, and communicating with each other.

**CHEAP LITERATURE FOR THE PEOPLE—THE SUNBEAM SERIES.**  
—The newly issued volume of this series—Realities of Irish Life, by W. Stewart Trench—is one which will be read with special interest at the present time, whilst it cannot fail to teach how false has been the policy of suggesting emigration as a remedy for the ill-feeling between landlord and tenant which exists in Ireland. It is not improbable that if but half of the money which has been expended in assisting Irishmen to leave their home had been applied to assist them in improving their holdings, which are often more unjustifiably neglected by the landlords than by the tenants, we should have had Ireland prosperous, and every inhabitant loyal. In giving people the Realities of Irish Life for 6d. Messrs Longman and Co. have done more to teach all classes how to remove Irish discon-

ent than could have been effected by considerable legislation such as we have recently heard too much of. The book should be read by everyone.

**CRANSTON'S BORING MACHINERY IN BRAZIL.**—At the St. John del Rey Company's Cuabá deep adit Mr. Cranston's air-compressing and rock-drill machinery has given full satisfaction. The tunnel measuring 7 ft. 6 in. by 10 ft. 6 in. at the forebreast, has been driven through tough hard killas and intersections of quartz rock. The tunnel was driven at the commencement a short distance by hand about 34 fathoms per month. The first month's progress driving with machine for September, 1880, was about 7½ fathoms. The distance driven in November was 10 fms. 2 ft. 9 in. At the time when the Emperor and Empress of Brazil inspected this machinery at work the tunnel was driving 14½ fathoms per month, and as the natives became more accustomed to the work the rate of driving gradually increased up to 17½ fathoms per month. The summary of work accomplished in 26 days of 12 hours with two drills was—Holes drilled 1000 = 3000 ft. The diameter at bottom of holes was 1½ in. and 4500 cartridges were used. The distance driven was 15 fathoms and the average total cost per fathom was 20s., including fixing air-pipes, laying double set of track rails, removing and tipping stuff, &c. The tunnel has now been driven in about 1800 linear feet. The lode has recently been struck and pierced into about 14 feet. The excellent speed attained here is the more important as it has enabled a large area of ground to be proved cheaply, so that although, as a local correspondent remarks, nothing of value has been found during the entire driving, the outlay has been much less than it would have been by hand labour. They will for a short time make some return at Cuabá, and it is hoped that by the time they have worked over the poor stuff now on hand they will discover something which will enable them to earn profits.

Mr. W. Weber, of Gresham House, has been appointed liquidator for the voluntary winding-up of the London Bank of Central America (Limited).

Mr. Justice Chitty has made an order continuing the voluntary liquidation of the Wynnad District Gold Mining Company (Limited), under the supervision of the Court, with Mr. James Waddell and Mr. George Twynan as joint liquidators.

**FCY, JAMES, AND CO.**—We have had some considerable disturbance in our market since our last. Copper has experienced a decline in price of nearly 2d. per ton during the last ten days, but a partial recovery in the last two days. The latest price for g.o.b.'s is 67½ to 67½ 15s. for cash. Other kinds have been quiet, and also rather easier to buy. Iron is rather inactive for manufactured, whilst Scotch pig is 6d. to 9d. per ton dealer; to-day 47s. 9d. per ton cash for g.m.b. Tin has been depressed by some failure of operators in Paris—a decline of about 3s. per ton in price of foreign, but there is again a firmer tone, and some recovery in value. Lead is steady, perhaps a shade firmer. Spelter is slightly dearer. Tin-plates unchanged.

LEAD ORES.				
Date.	Mines.	Tons c. q.	Price per ton.	Purchasers.
June 13—	Liburne	60	410 18 0	Weston, Son, and Co.
—	Cwmystwyth	30	3 15 6	ditto
—	East Darren	25	12 8 0	ditto

BLENDE.				
Date.	Mines.	Tons.	Price per ton.	Purchasers.
June 15—	New Wye Valley	50	42 7 6	Villiers Spelter Co.

**BLACK TIN.**  
WHEEL JANE.—Sales of tin this week realised 1293½ lbs. for 8 weeks returns.

#### SLATE QUARRY ENTERPRISE.

**MESSRS. D. C. DAVIES AND SON, ENGINEERS, OSWESTRY.**  
usually have a few SLATE QUARRY PROPERTIES that they have personally examined, which they could confidently commend as suitable for either public or private enterprise.

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50 Bedford. 20 Grogwinion. 50 South France.  
20 Blue Hills. 35 Gunnslake (Clitters). 100 South Penstruthal.  
50 Bratsberg. 200 Herodsfoot. 30 Tamar.  
75 Camborne Veau. 25 Hingston Down. 100 Tankerville.  
10 Carn Brea. 20 Killfretth. 10 Tincroft.  
5 Cook's Kitchen. 50 Kit Hill. 20 Tin Hill.  
200 Coctacovill. 30 Langford. 10 West Basset.  
100 Coates. 100 Morla Du. 10 West France.  
10 Devon Consols. 100 Mounts Bay. 10 West Kitty.  
100 Devon Friendship. 200 Mysore Reef. 35 West Devon.  
100 D'Eresby Mountain. 25 New Kitty. 10 West Peccor.  
10 Dolcoath. 50 North Bury. 20 West Polbreen.  
30 Drakewalls. 100 Norway Copper. 5 West Seton.  
55 East Blue Hills. 50 Old Shepherds. 5 Wheal Agar.  
30 East Buller. 500 Old O'lecombe. 15 Wheal Bassett.  
20 East Chiverton. 100 Parys Copper. 10 Wheal Grenville.  
10 East Pool. 100 Penhalls. 25 Wheal Jane.  
100 East Roman Gravel. 50 Phoenix United. 10 Wheal Kitty (St. Agnes).  
100 East Wheal Rose. 4 South Canadon. 50 Wheal Uny.  
5 Eberhardt. 20 South Condurrow. 25 Wheal Crebor.  
20 Frongoch. 100 South Crebor. 150 Wheal Sisters.  
50 Gawton. 10 South Crofty.

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**THE ROMAN GRAVELS BOUNDARY MINING COMPANY (LIMITED).**

Notice is hereby given, that the **LISTS OF APPLICATION FOR SHARES** will CLOSE on SATURDAY, June 24th, for LONDON, and on MONDAY, June 26th, for the COUNTRY.

By order.

3 and 4, Great Winchester-street, E.C.

#### ONTARIO SILVER MINING COMPANY.

**DIVIDEND No. 40.**  
THE REGULAR MONTHLY DIVIDEND OF FIFTY CENTS (2s.) PER SHARE has been DECLARED for May, PAYABLE at the Office of the Transfer Agents, WELLS, FARGO, and Co., 65, Broadway, on and after the 15th inst.

The above Dividend is payable at our office on all Stock registered in England.  
EIVES AND ALLEN, Agents, 99, Cannon-street, E.C.

#### MINE "EL CALLAO."

**GUAYANA, VENEZUELA**  
COUPONS OF SHARES ..... 322  
Gold in bars produced in the month of April, 1882, and remitted to Messrs. Baring Brothers and Co., London, 8431-73 ozs.  
DIVIDEND distributed for each coupon, \$300.  
(Signed) A. LICCIONI, President.  
(Signed) VICTOR T. GRILLET Treasurer.

#### THE ALMADA AND TIRITO CONSOLIDATED SILVER MINING COMPANY (LIMITED).

Notice is hereby given, that the **TWENTY-FOURTH HALF-YEARLY GENERAL MEETING** of the above company will be HELD at 47, Finsbury-circus, London, E.C., on FRIDAY, the 30th day of June, 1882, at Twelve o'clock precisely, for the purpose of receiving reports from the directors and manager, and transacting the ordinary business of the company.  
The Register of Transfers will be closed from the 15th June inst. to the 30th June inst., both inclusive.

By order of the Board, J. A. MORGAN, Secretary.

47, Finsbury-circus, E.C., 16th June, 1882.

#### THE "NEW CALLAO" (LIMITED).

Notice is hereby given, that an **EXTRAORDINARY GENERAL MEETING** of Shareholders will be HELD at the Cannon-street Hotel, on THURSDAY, the 22nd instant, at Two P.M., to receive a report on the New Callao Property by the Company's Engineer, Mr. Skerthly, who has just returned from Venezuela. The Directors trust that every Shareholder in the company will attend the meeting, which cannot fail to be of great interest to all concerned.  
F. J. WARNER, Secretary.  
Southsea Chambers, 97 and 99, Bishopsgate-street, London, E.C., June 14th, 1882.

#### THE FRONTINO AND BOLIVIA (SOUTH AMERICAN) GOLD MINING COMPANY (LIMITED).

Notice is hereby given, that the **HALF-YEARLY MEETING** of the shareholders of this company will be HELD at the City Terminus Hotel, Cannon-street, in the City of London, on WEDNESDAY the 28th day of June, 1882, at One o'clock P.M., for the following purposes:—  
To receive the report of the directors, and the audited statement of accounts of the company for the half-year ending the 30th December, 1881.  
Mr. Robert White, who has just arrived from the mines, will attend the meeting.

By order of the Board, J. JAMESON THURAN, Secretary.

184, Gresham House, Old Broad-street, London, E.C., 9th June, 1882.

#### THE RUBY AND DUNDERBERG CONSOLIDATED MINING COMPANY (LIMITED).

Notice is hereby given, that the **SECOND ORDINARY HALF-YEARLY MEETING** of the shareholders of the Ruby and Dunderberg Consolidated Mining Company (Limited) will be HELD at the City Terminus Hotel, Cannon-street, London, on TUESDAY, the 27th day of June, 1882, at 12-30 o'clock, to receive the report of the directors.  
The Transfer-Books will be closed from the 17th to the 27th inst., both days inclusive.

By Order, J. FORSTER HAMILTON, Secretary.

5, Crosby Square, London, 16th June, 1882.

#### THE RIO GRANDE DO SUL (BRAZIL) GOLD MINING COMPANY (LIMITED).

Notice is hereby given, that an **EXTRAORDINARY GENERAL MEETING** of the above company will be HELD at 47, Finsbury Circus, London, E.C., on TUESDAY, the 27th day of June, 1882, at Three o'clock in the afternoon precisely, to confirm the following Resolution passed unanimously at an Extraordinary General Meeting of this company, held at the above place on the 7th day of June, 1882, viz:—

"That the regulations of this company as already framed be altered by authorising the company so far to modify the conditions contained in the Company's Memorandum of Association, as by sub-division of its existing shares to divide its capital into shares of smaller amount as may be fixed by the said company by Special Resolution."  
And notice is hereby further given, that in the event of the above Resolution being confirmed, and immediately thereafter, the following SPECIAL RESOLUTION will be proposed, viz:—  
"That the whole of the shares in the above company be sub-divided from £5 to £1—that is to say, that each £5 share be at the option of the holder divided into five shares of £1 each."

By order of the Board, JAMES ARTHUR MORGAN, Secretary and Solicitor.

47, Finsbury Circus, London, E.C., June 9th, 1882.

#### SHARES FOR SALE—ONE HUNDRED AND FIFTY

SORTIDGE, fully paid, or any part, at 4s. 6d.  
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All communications for Mr. BAILEY should be mailed to—

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### MACADAM'S VARIABLE TURBINE.

This Wheel (which is now largely in use in England, Scotland, and Ireland) is the only one yet invented which gives proportionate power from both large and small quantities of water. It can be made for using a large winter supply, and yet work with equal efficiency through all variations of quantity down to a fifth or even less if required. It is easily coupled to a steam-engine, and in this way always assists it by whatever amount of power the water is capable of giving, and therefore saves so much fuel.

This Turbine is applicable to all heights of fall. It works immersed in the tail-water, so that no part of the fall is lost, and the motion of the Wheel is not affected by floods or back-water.

References to places where it has been used will be given on application to—

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**LIEBIG'S EXTRACT OF MEAT AND MALT WINE**  
(COLEMAN'S).  
A DELICIOUS BEVERAGE AND TONIC.

### IMPORTANT TESTIMONIAL.

Queen's Crescent, Haverstock Hill,  
London, March 5th, 1881.

DEAR SIR.—Some time since, being greatly fatigued with overwork and long hours at business, my health (being naturally delicate) became very indifferent. I lost all energy, strength, and appetite, and was so weak as to be scarcely able to walk.

As you are aware, I sent for a dozen of your Extract of Meat and Malt Wine, which, in a few days, pulled me up marvellously. Three or four glasses of it daily have quite altered and restored me to better health than ever, "without the assistance of a doctor."

I am now giving it to my son, twelve years of age, whom we have always thought consumptive, and from a puny ailing boy he seems to be fast growing into a strong healthy lad.

Enclosed you have cheque. Please send me two dozen of the "Extract." With thanks for your prompt attention to my last.

I am Sir, yours truly,

GEORGE A. TYLER.

Pints, 30s.; Quarts, 50s. per dozen. Carriage Paid to any Railway Station. Sample Bottle sent for 3d stamps.

Post-Office Orders and Cheques payable to—

COLEMAN AND CO.,

MUSPOLE STREET, NORWICH.

Sold by all Druggists in Bottles 2s. 9d. and 4s. 6d. each. Ask for Coleman's Liebig's Extract of Meat and Malt Wine, and "See that you get it."

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**AN ELIGIBLE OPPORTUNITY** is now offered for the SETTLEMENT of an ACTIVE YOUNG GENTLEMAN IN CANADA. He will be enabled to obtain his profession as a Solicitor in five, or if he be a Graduate in three years. Cost of living about £150. In the meantime he will have active work, and obtain a knowledge of the Dominion, which is destined to become one of the most prosperous of the Colonies. Premium, £100 sterling.

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Canada Land and Loan Agency

Sale Reference No. 2553.

**SALE OF STEEL RAILS AT MIDDLESBOROUGH.**  
TO RAILWAY CONTRACTORS, COLLIERY AND MINE OWNERS,  
MERCHANTS, BROKERS, AND OTHERS.

**MESSRS. JOEL AND SON** are instructed to OFFER FOR SALE, BY AUCTION (unless previously disposed of by private treaty, of which due notice will be given), at the Queen Hotel, Middlesborough, on Tuesday, June 20th, 1882, about THIRTEEN HUNDRED TONS of NEW FLAT-BOTTOMED STEEL RAILS, in Lots of about 50 tons and upwards, Sandberg's section, or similar thereto, weighing about 56 lbs. per yard, of the Darlington Iron Company's make, inspected by Sir Charles Fox and Company; together with the necessary STEEL FISH PLATES, now lying at the North-Eastern Railway Company's Yard, Dock Hill, Middlesborough.

Sale at Half-past One o'clock punctually.  
Specification and section may be had of the Auctioneers, 87 and 89, Pilgrim-street, Newcastle-on-Tyne; or Mr. JOHN H. AUSTIN and Co., 90, Cannon-street, London, E.C.

JUNE 23RD, 1882.

**VALUABLE AND EXTENSIVE MINING MACHINERY AND MATERIALS**  
FOR SALE AT SOUTH ROSKEAR MINE, CAMBORNE.

**MR. H. V. NEWTON**, Auctioneer, Valuer, &c., Polstrong Farm, Camborne, is favoured with instructions TO SELL, BY AUCTION, at South Roskear Mine, Camborne, on Wednesday, the 28th day of June, 1882, the WHOLE OF THE EXTENSIVE AND VALUABLE

**MINING MACHINERY AND MATERIALS**

THESE, VIZ.—

A 70 in. PUMPING ENGINE, 10 ft. stroke in cylinder, and 7 ft. 6 in. in shaft, with three 10 ton boilers and fittings, balance bob, and 60 ft. shears and pulleys, complete.

A 14 in. horizontal WINDING ENGINE, 8 ft. stroke, with winding drum and steam capstan attached.

A 28 in. WINDING ENGINE, 9 ft. in cylinder, and 8 ft. outside, with two 10 ton boilers and fittings, complete.

A 36 in. STAMPING ENGINE, 8 ft. 8 in. stroke, with two 8 ton boilers and fittings, with three stamps axes and 48 heads, complete.

A 16 in. AIR COMPRESSOR, 3 ft. stroke, with 6 ton boiler for air receiver attached.

A 36 in. STAMPING ENGINE, with six 16 head axes, complete.

Four BRENTON'S REVOLVING CALIBERS, 24 ft. bed each.

A 24 ft. WATER WHEEL, 2 ft. breast, and 12 in. pitch.

100 fms. PITWORK, from 12 to 14 in., including pumps, H pieces, door pieces, matchings, poles, and windbores.

30 fms. 5 in. PUMPS, with pole, H and door piece.

200 fms. 4 in. cast iron flange AIR PIPES.

150 fms. 3 in. ditto ditto

200 fms. 2 in. ditto ditto

100 fms. 2 in. wrought iron ditto

100 fms. 1 in. ditto ditto

Five MCKEAY'S ROCK BORING MACHINES and tackling.

400 fms. iron BRIDGE RAILS.

100 fms. 2 in. horizontal PUMPING RODS, with shieves.

100 fms. 14 in. pitch PINE RODS.

Strapping plates and bolts; five shaft tackles, with shieves, complete; 5 to boiler for dry.

ON DRESSING FLOORS.

A WATER WHEELS of various sizes.

300 fms. iron SHAFTING, with cog wheels, &c.

40 centre HEAD BUCKLES; 50 cleaning frames, together with a vast quantity of useful materials in the fitting shop, smith's shop, sampling house, pitman's house, and material houses and yards, and on the mine generally, such as are used on an extensive and well-appointed mine.

The whole will be first offered in One Lot, and if not sold will be immediately sold in Lots to suit the requirements of purchasers.

Catalogues and all further information may be obtained by applying to THOMAS CORNISH, Esq., Solicitor, Penzance; and Capt. JAMES HOSKING, the Manager of the Mine, Roskear Villas, Camborne; and to the Auctioneer, Polstrong, Camborne.

Refreshments at Eleven o'clock. Sale to commence at Twelve o'clock.

Dated Polstrong, Camborne, June 12th, 1882.

### PRELIMINARY.

**THE VALUABLE PROPERTY** known as the NORTH WALES TAN-Y-GRIG GRANITE SETT QUARRIES

Overlooking Carnarvon Bay, 2 miles from the village of Chyrwg, and on the high road midway between Carnarvon and Pwllheli.

On Friday, the 29th day of June, at Two o'clock in the afternoon, at the Law Associations Rooms, Liverpool,

**MESSRS. BENTINCK AND SON** WILL OFFER, in One Lot or otherwise, and subject to conditions of sale as may be then produced, the ENTIRE INTEREST in the LEASES, TRAMWAYS, JETTY, PLANT, and MACHINERY in connection with the above quarries, the produce whereof is precisely similar to that of the adjoining and far famed quarries of the Welsh Granite Company, and for which there appears to be an ever increasing demand.

Most favourable reports of eminent authorities, with full particulars, may be had in the meantime from Mr. JOHN ROBERTS, Solicitor, Bangor; the Auctioneers, Lord-street, Southport; and Messrs. PAYNE and GALLOWAY, Solicitors, 25, Brasenose-street, Manchester.

DAVID GRIFFITHS, the person in charge, will show the property.

### SALE OF LEAD MINING PLANT.

**TO BE SOLD, BY PRIVATE CONTRACT**, a very large quantity of MINING PLANT belonging to the late Lessee of HURST MINES, in the parish of Marick, near Richmond and Reeth, in the North Riding of Yorkshire:

ONE 15 horse power HYDRAULIC ENGINE, with 6 and 7 in. Pressure Pipes, 6 in. Pumps, &c.

A first-class OVERSHOT WATER WHEEL, 27 ft. diameter, 3 1/4 ft. breast, with Crushing Mill attached.

ONE ditto, 22 ft. diameter, 3 1/4 ft. breast, with Crushing Mill attached.

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7000 Yards of RAILS, varying from 24 lbs. to 12 lbs. per yard.

A large quantity of WAGONS, BARROWS, and other MINING IMPLEMENTS necessary for working Lead Mines.

For further particulars, apply to Mr. RALPH METCALFE, Hurst, Reeth, Richmond, Yorkshire; or to Messrs. LEMAN, WILKINSON, and Co., Solicitors, York.

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**TO BE SOLD, BY PRIVATE TREATY, VALUABLE** QUARRIES, with PLANT, and TWO VESSELS on the seaboard, in the parishes of Llanallgo and Llanengrad, producing excellent stone, in good demand for dockworks and other purposes.

The cleavage of the stone is remarkably good, it is easily worked, and very large blocks can be easily obtained. The quarries have never been fully developed, and the property is well worth the attention of capitalists and contractors.

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Address, GEORGE O. TALBOT, Birmingham.

**FOR SALE**, a 30 H.P. PORTABLE STEAM ENGINE; with link-motion reversing gear, has drum and gearing complete for winding and pumping.

A 14 H.P. PORTABLE WINDING AND PUMPING ENGINE.

Also a 6 H.P. PORTABLE HOISTING ENGINE.

Apply to—  
BARROWS AND STEWART, ENGINEERS, BANBURY.

**SECOND-HAND, BUT EQUAL TO NEW:—**

STEAM BOILERS.—Three first-class Boilers, 30 ft. by 7 ft., two flues, Galloway tubes in, and fittings, four years old, insured at 75 lbs. pressure. Will be sold cheap.

BOILERS.—Two Boilers, 28 ft. by 7 ft., two flues. Been working at 65 lbs. Pressure on rails, £130 each.

Other sizes of Boilers in stock, in excellent condition, 28 ft. by 7 ft., 24 ft. by 7 ft., 24 ft. by 6 ft., 20 ft. by 5 ft., 15 ft. by 5 ft., and 12 ft. by 5 ft. Sale for 65 and 60 lbs. pressure. Very cheap.

PUMPING ENGINES.—Beam and Horizontal. Diameters of cylinders, 100 in., 90 in., 65 in., 60 in., and 38 in. Very cheap.

WINDING ENGINES AND COLLIERY PLANT of every description, second-hand, in stock.

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WEIGHING MACHINE, with platform 10 ft. 0 in. x 7 ft. 4 in., surrounded by an iron frame well balanced, and in good condition, with two guide plates 9 ft. 6 in. long, weighing up to 4 tons. Makers, Young and Spence, Salop.

Apply to D. EVANS, Solicitor, Machynlleth, Mon., on or before June, 1882.

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For Prize Lists, Entry Forms, and all information, apply to the Secretary,

EDWARD KITTO, F.M.S.,

Polytechnic Hall, Falmouth.

## COAL MINES REGULATION ACT, 1872.

**EXAMINATION FOR MANAGERS' CERTIFICATES OF COMPETENCY.**

DISTRICT UNDER THE CHARGE OF THOMAS BELL, Esq.,

H.M. INSPECTOR OF MINES.

**NOTICE IS HEREBY GIVEN**, that an EXAMINATION for MANAGERS' CERTIFICATES OF COMPETENCY, under the above-named Act, will be HELD on the 31st day of July, 1882, and CANDIDATES INTENDING TO PRESENT THEMSELVES AT SUCH EXAMINATION must, on or before the 24th day of July, notify such intention to the Secretary of the Board of the above-mentioned District, from whom all information as to particulars can be obtained.

By order of the Board,

G. W. BARTLETT, Secretary.

Cleveland Parade, Darlington.

N.B.—Persons who do not reside within the District are equally eligible for examination with those who do.

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**PEPPER MILL BRASS FOUNDRY COMPANY**  
OF WIGAN,

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constituting a company to work them. They comprise—

A SILVER-LEAD SETT.

COPPER SETT.

GOOD SLATE QUARRY.

For full particulars, and to treat, apply to Mr. W. PAYNTER, Jan.,

Commission Agent and General Merchant, Wadebridge, Cornwall

**PARTNERSHIP OR OTHERWISE.—£4500 WANTED TO**

FULLY DEVELOPE a comparatively NEW COLLIERY in

SOUTH WALES, producing best quality. A minimum profit of

6 per cent. per annum guaranteed.

Address, WM. THOMAS, M.E., Bryngwenyn, Llanelly.

**TO BE ADJUDGED**, in the Offices of M. CAREE, Notary, 9,

Place des Petits-Pères, Paris, on the 30th of June, 1882, the

PROPERTY of the COMPAGNIE DES MINES DE FER MAGNETIQUE, at COLLO, in ALGERIA. Upset price, 400,000 fr.

Apply, for particulars, to M. EDMOND MOREAU, Avocat and Judicial

Liquidator, 22, Rue du Pont-Neuf, Paris.

### TO RED LEAD MANUFACTURERS.

# NOBEL'S DYNAMITE



Manufactured and sold by  
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REDDING MOOR WORKS, POLMONT STATION, STIRLINGSHIRE.

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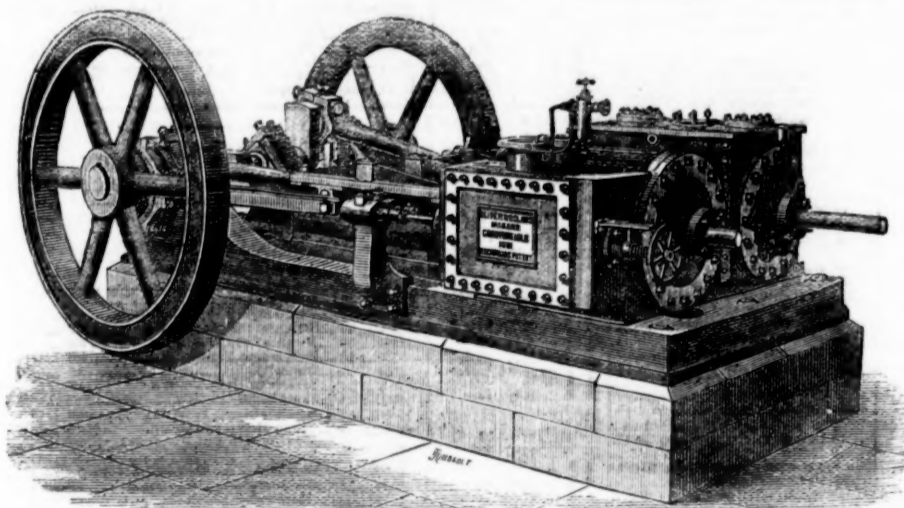
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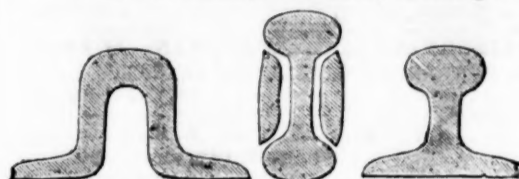
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3200 Blue Hills, t, St. Agnes	4 6	1 1/2	1 1/2	0 4	0 0	0 4
6000 Carn Brea, c, t, Illogan	9 7 11	15 1/2	12 1/2	52 11	8 0	0 0
10240 Devon Gr. Consols, c, t, Tavistock	1 0	0 0	7 1/2	118 7	0 0	0 0
4236 Dolcoath, c, t, Camborne	10 14	10 71	67 1/2	129 13	9 2	0 0
6400 East Pool, t, St. Agnes	0 9	5 4	50 52 1/2	29 11	0 0	0 0
12500 Frongoch, t, Cardigan (10000 sh. sh.)	2 0	0 0	3 1/2	5 5/8	0 0	0 0
12000 Great Holway, t, Flintshire	4 0	0 0	17 1/2	28 4	0 0	0 0
15000 Great Laxey, t, Leicestershire	0 6	0 0	8 1/2	3 11	0 0	0 0
6400 Green Hurl, t, Durham	2 0	0 0	2 1/2	0 16	4 0	0 0
20000 Grocwinion, t, Cardigan	2 2	0 0	2 1/2	0 19	9 0	0 0
10240 Gunnislake (Glitters), t, e	25 0	0 0	—	83 5	0 0	0 0
2800 Isle of Man, t, Isle of Man	4 3	6 6	4 6	0 2	8 0	0 0
6000 Killfret, t, Chacewater	8 0	0 0	2 1/2	613 0	0 0	0 0
20000 Leadhills, t, Lanarkshire	2 0	0 0	4 1/2	1 14	0 0	0 0
430 Leaburn, t, Cardiganshire	5 0	0 0	10 8	63 8	0 0	0 0
10000 Leinster Mining Co., t, Wexham	7 0	0 0	—	24 0	0 0	0 0
9000 Mining Co. of Ireland, t, e, t	0 0	0 0	—	0 10	0 0	0 0
8000 Mon, t, Anglesea	2 10	0 0	—	3 14	0 0	0 0
11220 North Hendre, t, Wales	1 5	0 0	—	0 9	3 0	0 0
8146 Ditto	13 6	0 0	4 1/2	4 16	0 0	0 0
2000 North Levant, t, St. Just	4 0	0 0	—	17 0	0 0	0 0
4760 Penhalls, t, St. Agnes	0 0	0 0	—	0 10	0 0	0 0
9000 Pennant, t, bar, North Wales	6 0	0 0	—	17 2	0 0	0 0
12000 Phoenix United, t, e, Llanthorne	1 0	0 0	—	0 18	6 0	0 0
18000 Pr. Patrick, t, e, (t, 12000 p. 10 p. e)	2 0	0 0	—	0 4	0 0	0 0
10000 Red Rock, t, Cardigan	7 10	0 0	—	0 5	0 0	0 0
12000 Roman Gravel, t, Salop	1 0	0 0	—	0 5	0 0	0 0
4000 Rhydalun, t, Wales	1 5	0 0	—	0 10	0 0	0 0
512 South Cardigan, t, St. Cleer	6 5	6 8 1/2	8 1/2	9 3	0 0	0 0
6123 South Condurrow, t, e, Camborne	1 6	0 0	—	0 4	0 0	0 0
9000 South Daren, t, Cardigan	11 12	0 0	12 1/2	51 3	6 0	0 0
4500 South West Frances, t, Illogan	4 5	5 1/2	5 7	25 8	0 0	0 0
4000 Tincroft, t, e, Pool, Illogan	1 0	0 0	—	0 1	0 0	0 0
15000 Van, t, Llanidloes	1 0	0 0	—	0 1	0 0	0 0
12000 West Holway, t, Flintshire	93 0	15 12	14 33	0 1	0 0	0 0
512 West Tolgus, t, Redruth	15 0	0 0	15 17 1/2	111 10	0 0	0 0
2400 West Wheel Beton, t, Camborne	7 0	4 1/2	10 1/2	28 3	8 0	0 0
6000 West Wasset, t, Illogan	2 4	0 0	—	0 13	9 0	0 0
12000 Wheel Crebor, t, Tavistock	18 0	0 0	—	42 10	8 0	0 0
1024 Wheel Eliza Consols, t, St. Austell	1 0	0 0	—	0 1	0 0	0 0
18000 Wheel George, t, e, Carnarvon	5 9	6 1/2	10 1/2	12 18	6 0	0 0
6000 Wheel Grenville, t, e, Camborne	7 11	0 0	10 1/2	8 13	6 0	0 0
4295 Wheel Kitty, t, St. Agnes	2 0	0 0	—	0 2	0 0	0 0
3000 Wheel Pevor, t, Redruth	2 0	0 0	—	0 2	0 0	0 0

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Shares.	Paid.	Last wk.	Clos. pr.	Total div.	Per sh.	Last pd.
35500 Alamillos, t, Spain	2 0	0 0	—	2 5	8 0	0 0
10000 Almada and Tinto Consols, t, Spain	1 0	0 0	—	0 6	3 0	0 0
2000 Australian, t, South Australia	7 7	6 1/2	1 1/2	1 5	6 0	0 0
15000 Birdseye Creek, t, California	4 0	0 0	—	1 1	0 0	0 0
20000 Carpe Copper Mining, t, South Africa	7 0	0 0	—	52 53 1/2	47 4	0 0
50000 Copiapo, t, Chile (24 shares)	3 8	0 0	—	1 17	9 0	0 0
70000 English and Australian, t, e, St. Aust.	2 10	0 0	—	3 0	1 0	0 0
2000 Eng. Aus., t, Viet. pref. (20000 o.)	1 0	0 0	—	0 3	0 0	0 0
25000 Fortuna, t, Spain	2 0	0 0	—	8 1	0 0	0 0
60000 Frontino and Bolivia, t, New Gran.	2 0	0 0	—	0 8	0 0	0 0
800000 La Plata, t, Leadville	2 0	0 0	—	0 11	3 0	0 0
15000 Linares, t, Spain	3 0	0 0	—	18 10	0 0	0 0
60000 New Quebrada, t, Venezuela	5 0	0 0	—	0 5	6 0	0 0
1000 Ditto, Debutentes	100 0	0 0	—	98 98	6 per cent.	0 0
5000 Oregon, t, Oregon, U.S. (pref. sh.)	4 0	0 0	—	0 2	6 0	0 0
50000 Pannicillo, t, Chile	4 0	0 0	—	6 1/2	6 1/2	0 0
25000 Pitalung, t, Brazil (in 6000 £1 pd.)	10 0	0 0	—	0 1	0 0	0 0
14000 Pontgibaud, t, France	20 0	0 0	—	13 13	28 17	0 0
100000 Port Phillip, t, Omea (24 shares)	1 0	0 0	—	1 14	2 0	0 0
50000 Rara Fortuna, t, e, Argent. Republic	1 0	0 0	—	0 2	0 0	0 0
54000 Richmond Consol., t, Nevada	5 0	0 0	—	8 1/2	8 1/2	0 0
24532 Rio Tinto, t, e, Mortgage Bds., Huelva	100 0	0 0	—	102 104	5 per cent.	0 0
25000 Rio, t, shares	10 0	0 0	—	24 1/2	24 1/2	0 0
40000 Santa Barbara, t, e, Brazil	0 10	0 0	—	0 12	0 0	0 0
120000 Scottish-Australian Mining Co., t, e	0 10	0 0	—	1 1/2	1 1/2	0 0
40000 Ditto, New	0 10	0 0	—	10 p. cent.	Apr. 1882	0 0
22500 Sierra Buttes, t, California	2 0	0 0	—	2 4	0 0	0 0
40625 Ditto, Plumas Eureka	2 0	0 0	—	2 16	0 0	0 0
230000 St. John del Rey (45 Stock and multiples dealt in)	170 180	0 0	—	5 p. cent. for half year June 1882	0 0	0 0
18986 Tharisa, t, e, Spain (311000 £1 p. sh.)	10 0	0 0	—	41 41	31 6	0 0
20000 Tolima, t, e, Colombia	1 0	0 0	—	2 1	6 0	0 0
25000 Victoria (London), t, e, Austral.	5 0	0 0	—	0 13	10 0	0 0
100000 Victoria (Nevada), t, e, U.S. Deb. Bds.	1 0	0 0	—	0 10	0 0	0 0
15000 Western Andes, t, Colombia	5 0	0 0	—	3 14	6 0	0 0
2100 W. Prussian (55000 pref. sh. £10 pd.)	10 0	0 0	—	9 10	4 2	0 0
54800 Yorke Pen., t, e, South Aust. Pref. t.	1 0	0 0	—	0 3	0 0	0 0

† Have made calls since last dividend was paid.

## NON-DIVIDEND BRITISH MINES.

Shares.	Paid.	Last wk.	Clos. pr.
30000 Alston United, t, Cumberland	1 0	0 0	1 1/2
12000 Asheton, t, e, Carnarvonshire	5 0	0 0	—
15883 Bedford Unit, t, e, Tavis (21 lab.)	0 12	0 0	—
13000 Beddard, t, e, Denbighshire	1 0	0 0	—
30000 British, t, e, Wrexham	1 0	0 0	—
30000 Buco Consols, t, e, Flintshire	1 0	0 0	—
20000 Bwch United, t, e, Cardigan	0 17	6 1/2	1 1/2
50000 Cambrian, t, e, Cardiganshire	2 0	0 0	—
50000 Carn Camborne, t, e, Camborne	1 0	0 0	—
20000 Carnarvon, t, e, Carnarvonshire	1 0	0 0	—
37500 Carnarvonshire Cons., t, e, Llanrwst	2 0	0 0	—
30000 Carpellis Consols, t, St. Stephens	1 0	0 0	—
20000 Central Cons., t, e, Gwent	0 15	6 1/2	—
20000 Central Fockale, t, e, Isle of Man	1 17	6 1/2	—
25000 Coed-y-Fedw-Pant-y-Buarth, t, e	1 0	0 0	—
2450 Cook's Kitchen, t, Illogan	30 14	9 37 1/2	32 35
10000 Cornwall Great Cons. (4500 issued)	1 0	0 0	—
4000 Crook Burn, t, e, Cumberland	0 17	0 0	—
10000 Crosswood Mining Lands, t, e	1 0	0 0	—
45000 D'Esby Mountain, t, e, Llanrwst	0 10	0 0	—
12000 Denbighshire Consolidated, t, e	3 0	0 0	—
20000 Devon, t, e, Devon	1 0	0 0	—
60000 Devon Friendship, t, e, Tavistock	1 0	0 0	—
12000 Devon Great United (21 shares)	1 5	0 0	—
20000 Drake Wells, t, e, Calstock	0 15	0 0	—
10000 Dubby Syke, t, e, Durham	1 0	0 0	—
12000 East Blue Hills, t, St. Agnes	0 5	0 0	—
6000 East Botallack, t, St. Just	0 10	0 0	—
6144 East Chilverton, t, e, Cornwall	4 8	6 1/2	—
4000 East Chilverton, t, e, Cornwall	10 12	3 1/2	—
30000 East Devon Cons., t, e, Buckfastleigh	2 0	0 0	—
30000 East Herodafot, t, e, Liskeard	1 0	0 0	—
20000 East Long Rake, t, e, Wales	1 0	0 0	—
21000 East Roman Gravel, t, e, Salop	0 15	3 1/2	—
18000 East Van, t, e, Llanidloes	5 0	0 0	—
20048 East Wheel Lovell, t, Helston	15 13	6 1/2	1 1/2
25000 East Wheel Rose, t, e, Newlyn East	1 0	0 0	—
12000 East Wheel Rose, t, e, Newlyn East	1 0	0 0	—
40000 Glasg. Car., t, e, (30000 sh. £1 pd., 10000 15s. pd.)	4 0	0 0	—
40000 Glenroy, t, e, Isle of Man	4 0	0 0	—
30000 Gobbett, t, e, Dartmoor	1 0	0 0	—
10000 Gobbett, t, e, Dartmoor	1 0	0 0	—
32000 Goginan, t, e, Cardiganshire	1 0	0 0	—
25000 Goodere, t, e, St. Cleer	1 0	0 0	—
95000 Goredard and Merlyn Cons., t, e, Flint	2 10	0 0	—
80000 Great Polgoth United	1 0	0 0	—
60000 Great West Chilverton, t, e, St. Agnes	0 5	0 0	—
10000 Gwyn-y-Mynydd, t, e, Flint (pref.)	4 0	0 0	—
70000 Gwydyr Amal, t, e, Carnarvon	1 0	0 0	—
12000 Herodafot, t, e, near Liskeard	0 16	0 0	—
18000 Hingston Down, t, e, Calstock	0 12	0 0	—
20000 Kirmichael, t, e, (20000 unissued)	1 0	0 0	—
25000 Kit Hill Gr. Cons., t, e, (21 sh.)	0 15	0 0	—
15000 Lady Ann, t, e, Llanidloes	1 0	0 0	—
20000 Lady Ashurst, t, e, Llanidloes	1 0	0 0	—
15000 Lady Bertha, t, e, Tavistock	1 0	0 0	—
25000 Langford, t, e, e, Callington	0 10	0 0	—
25000 Levant, t, e, St. Just	11 10	0 0	—
15000 Llanegla, t, e, Wales	1 0	0 0	—
10000 Lomax, t, e, Helston	1 0	0 0	—
5120 Lovell, t, e, Wendron	0 16	0 0	—
20000 Marke Valley, t, e, Llanidloes	6 11	0 0	—
20000 Medlyn Moor, t, e, (17000 sh. £1 pd.)	0 15	10 0	—
20000 Mid-Devon, t, e, (17000 sh. £1 pd.)	0 15	10 0	—
20000 Mona Consols, t, e, Anglesea	1 0	0 0	—
10000 Monkstoun, t, e, man, Devon	2 0	0 0	—
20000 Mostyn Consols, t, e, Flint	1 0	0 0	—
10000 Mynydd Goredard, t, e, Cardigan	4 0	0 0	—
12000 Morfa Du, t, e, Anglesea	1 0	0 0	—
80000 Mounts Bay, t, e, Breage	1 0	0 0	—
6144 Mounts Bay, t, e, Redruth	1 5	0 0	—
20000 New Cornish, t, e, Helston	3 0	0 0	—
8000 New Dolcoath, t, e, Camborne	3 0	0 0	—
100000 New Great Wheel Vor, t, Breage	0 10	0 0	—
10000 New Holmbush, t, e, e, Callington	2 10	0 0	—
6000 New Killy, t, e, St. Agnes	0 12	0 0	—
12000 New Penrose, t, e, e, Helston	1 0	0 0	—
15000 New Redmoor, t, e, e, Callington	1 0	0 0	—
35000 New River, t, e, e, Lelant	6 0	0 0	—
20000 New River, t, e, e, Lelant	6 0	0 0	—
12000 New West Cornish, t, e, Liskeard	4 0	0 0	—
30000 New Wheel Pevor, t, e, Redruth	0 10	0 0	—
35000 New Wye Valley, t, e, Montgomery	1 0	0 0	—
20000 North Busy, t, e, e, Scorrier	1 5	8 1/2	—
10000 N. D'Esby Mount, t, e, e, Carnarv.	1 0	0 0	—

## NON-DIVIDEND MINES—continued.

Shares.	Paid.	Last wk.	Clos. pr.
25000 North Goginan, t, e, Cardiganshire.....	1 0 0	1 1/2	1 1/2
6100 North Green Hurl, t, e, (3400 15s. pd.).....	0 2 6	3 3/4	3 3/4
25000 North Grogwinion, * s, e, Cardighr.....	1 0 0	1 1/2	1 1/2
12000 North Herodafot, t, e, Liskeard.....	0 8 6	3/4	3/4
50000 North Molton, t, e, m, t, t, v, von.....	1 0 0	—	—
6000 North Penstruthal, t, e, e, w, w, e, n, a, p.....	2 3 8	3 1/2	3 1/2
2336 North Trekerby, t, e, St. Ag.....	8 17 10	—	—
8000 Northern, t, e, e, St. Ag.....	1 0 0	3 1/2	3 1/2
40000 Okel Tor, t, e, e, St. Ag.....	1 0 0	—	—
80000 Old Shepherds t, e, Cornwall.....	1 0 0	—	—
12000 Pandora, t, e, Carnarvon.....	2 0 0	3 1/2	3 1/2
11612 Pant-y-Mwyn, t, e, Mold.....	2 0 0	2 1/2	1 3/4
45000 Parva Corporation, t, e, Anglesea.....	1 0 0	3 1/2	3 1/2
7500 Pateley Bridge, t, e, Yorkshire.....	1 0 0	—	—
6000 Pedn-an-drea, t, e, Redruth.....	2 13 0	3 1/2	3 3/4
12000 Pelyn Wood, t, e, Lanvrey.....	0 5 6	—	—
6000 Pendarves United, t, e, St. Agnes.....	8 0 0	—	—
12000 Pen-y-Ore, t, e, Flintshire.....	1 0 0	—	—
15000 Perran Consols, * s, e, e.....	1 0 0	1 1/2	1 1/2
12000 Perran Wheel Alfred, t, e, e.....	0 2 6	3 1/2	3 1/2
10000 Pioner, * var. Wales.....	1 0 0	—	—
3000 Polbreton, t, e, Cornwall.....	0 5 0	—	—
10000 Polrose, t, e, Cornwall.....	0 18 0	3 1/2	3 1/2
10000 Port Nigel, * s, e, Carnarvonshire.....	2 0 0	—	—
6000 Prince Royal, t, e, s, St. Agnes.....	1 0 6	—	—
12000 Prince of Wales, t, e, St. Agnes.....	0 15 0	3 1/2	3 1/2
15000 Royalton, t, e, St. Agnes.....	1 0 0	1 1/2	1 1/2
38000 Russell United, t, e, Tavistock.....	0 15 0	3 1/2	1 1/2
30000 Silver Hill, * e, Callington.....	1 0 0	1 1/2	1 1/2
50000 Sinclair, t, e, bl, Whitford.....	1 0 0	1 1/2	1 1/2
40000 Sortridge, * e, Horrabridge.....	1 0 0	8 1/2	1 1/2
6000 South Carbis, t, e, Redruth.....	0 10 0	2 1/2	2 1/2
35000 So. Devon Unit, * e, Buckfastleigh.....	1 0 0	3 1/2	3 1/2
5000 South Dolcoath, t, e, Illogan.....	0 14 0	1 1/2	1 1/2
6000 South Penstruthal, t, e, e, Gwennap.....	2 2 6	3 1/2	3 1/2
8000 South Penryn, t, e, e, Camborne.....	4 14 0	2 1/2	2 1/2
40000 South Western, t, e, e, Tavistock.....	1 0 0	3 1/2	3 1/2
2043 South Wheel Crofty, t, e, Illogan.....	20 0 0	10 1/2	10 1/2
40000 Tamar, s, t, e, Bearaolton.....	0 15 0	1 1/2	1 1/2
110000 Tarkentville Gt. Consols, t, e, Salop*.....	0 15 0	3 1/2	3 1/2
6400 Teakdale, t, e, Durham (pref.).....	1 0 0	—	—
20000 Tin Hill, * t, St. Stephens.....	1 0 0	1 1/2	1 1/2
6000 Tregebo, t, e, Cornwall.....	3 0 0	3 1/2	3 1/2
8000 Trevaunance, t, St. Agnes.....	0 2 0	2 1/2	2 1/2
20000 Trevine Consols, t, e, Gwennap.....	0 5 0	—	—
12000 Trianon, t, e, t, e, (pref. sh).....	1 0 0	3 1/2	3 1/2
1000 Vaughan, * e, Cardiganshire.....	10 0 0	—	—
8000 Victor, t, e, Cilcen, Flintshire.....	10 0 0	—	—
2000 Violet Seton, t, e, Camborne.....	12 0 0	20 1/2	15 20
15000 Vincent, * t, Altarnun.....	1 0 0	3 1/2	3 1/2
20000 Walkham United, * t, e, Tavistock.....	1 0 0	3 1/2	3 1/2
12000 West Assheton, t, e, Carnarvon.....	1 0 0	2 1/2	1 1/2
12000 West Caradon, t, St. Cleer.....	0 7 3	3 1/2	3 1/2
3000 W. Craven Moor, t, e, Pateley Bridge*.....	10 0 0	—	—
12000 West Crebor, t, e, Tavistock.....	0 6 6	3 1/2	3 1/2
12000 West Devon Consols, t, e, Calstock.....	1 0 0	3 1/2	3 1/2
10000 West Godolphin, t, e, Breage.....	1 0 0	2 1/2	2 1/2
6000 West Kitty, t, St. Agnes.....	0 15 0	3 1/2	3 1/2
20000 West Liskeard, t, e, Cardigan.....	0 0 0	—	—
3000 West Mary Ann, t, e, Menheniot.....	1 13 0	1 1/2	1 1/2
20030 W. Pateley Bridge, t, e, Yorkshire.....	1 0 0	3 1/2	3 1/2
6000 West Polbreen, t, e, St. Agnes.....	0 4 0	1 1/2	1 1/2
5190 West Polidice, St. Day.....	6 0 0	5 1/2	5 1/2
2048 West Hall Frances, t, e, Illogan.....	32 3 3	10 1/2	8 9
3000 West Wheel Favour, t, e, Redruth.....	3 0 6	13 1/2	10 12
20000 West Wheel Favour, t, e, Montgomery.....	3 0 0	—	—
6114 Wheel Bassett, t, e, Illogan.....	15 6 0	15 1/2	12 1/2
3000 Wheel Boys, t, e, Redruth.....	6 16 0	2 1/2	2 1/2
12000 Wheel Coates, t, St. Agnes.....	0 2 0	1 1/2	1 1/2
2585 W. Conf., & No. Tres, t, e, Gwennap.....	2 2 0	—	—
50000 Wheel Elizabeth, * t, Cornwall.....	1 0 0	—	—
5000 W. Fortune, * s, t, e, s, Harrowbarrow.....	1 0 0	—	—
12288 Wheel Jane, t, e, Kea.....	1 16 8	1 1/2	1 1/2
12000 Wheel Jewel, t, e, St. Hilary.....	1 0 6	3 1/2	3 1/2
25000 Wheel Liskeard, t, e, Liskeard.....	2 0 0	2 1/2	2 1/2
12000 Wheel Luskay, t, e, Callington.....	0 1 6	3 1/2	3 1/2
6000 Wheel Owles, t, St. Just.....	2 0 0	10 1/2	9 10
2000 Wh. Prussia, & Cardew, t, e, Rith.....	7 2 0	1 1/2	1 1/2
6000 Wheel Silsby, t, e, Lelant.....	3 10 0	1 1/2	1 1/2
4098 Wheel Uny, t, e, Redruth.....	16 11 0	3 1/2	3 1/2
65000 Yorkshir, * t, e, e.....	1 0 0	—	—
4000 Ystwith, t, e, Cardigan.....	1 0 0	3 1/2	3 1/2